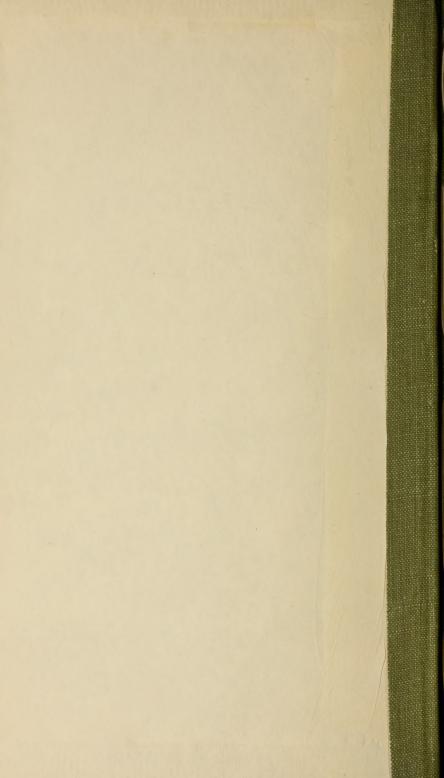
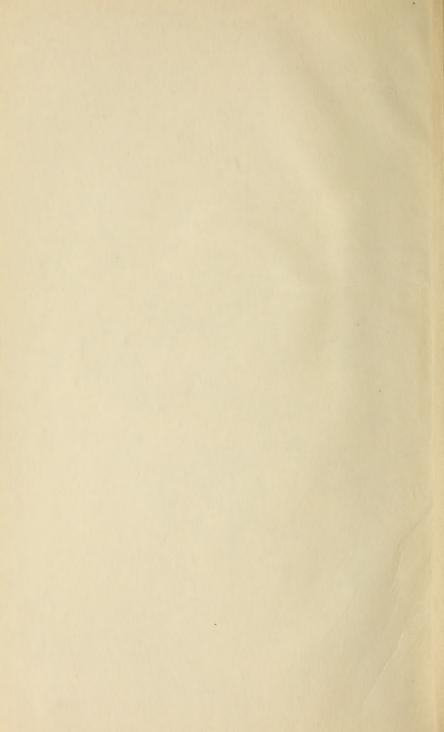
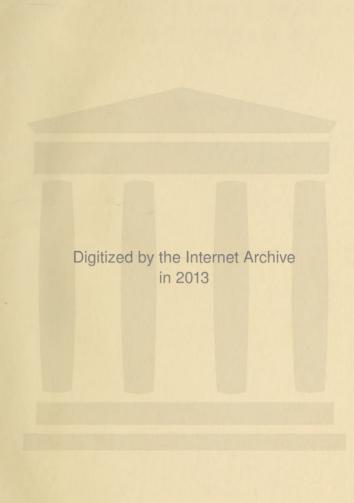


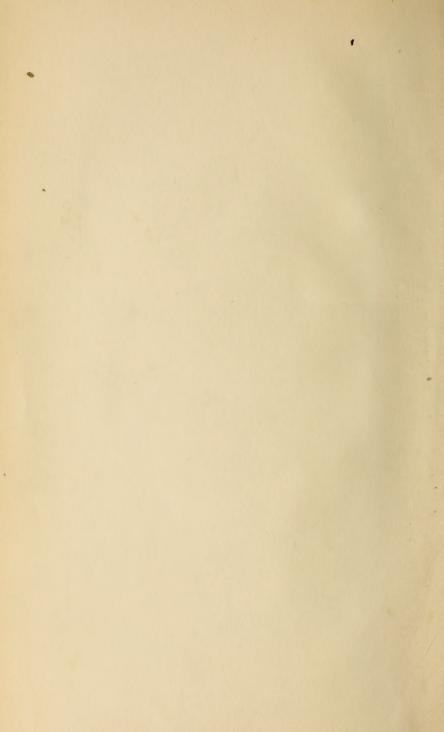
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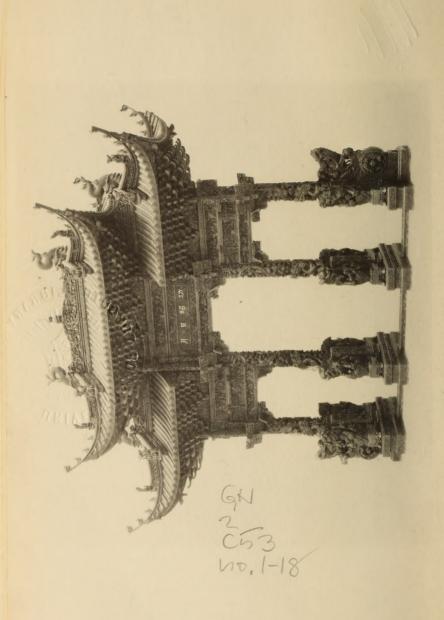
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FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1922

LEAFLET

NUMBER 1

The Chinese Gateway

(At South End of Stanley Field Hall)

a prominent place in the streets of Chinese cities, in the courtyards of temples, or on avenues leading to a tomb or mausoleum. As a type of architecture, they are based on the so-called Torana of India, plans of which were introduced into China and Japan as a sequel of Buddhism. In the Buddhist art of ancient India, ornamental stone rails were built as enclosures around the topes (mounds or structures containing sacred relics), four gateways of highly decorative style being placed in these rails. The Chinese, however, did not slavishly imitate these monuments, but merely took them as models and lavished on them the wealth of their own decorative motives.

While the Romans erected triumphal archways in commemoration of military successes, while the people of India built them in honor of their greatest man, Buddha, the minds of a philosophical nation like the Chinese drifted in a different direction. The exaltation of military victories had no room in their thoughts; they raised sanctuaries to glorify their philosophers and statesmen, their sages and scholars, who shaped and advanced the mental and ethical culture of the nation. The character of Chinese art is impersonal, nor does it glorify the individual. China has no statues or portraits of emperors and generals.

Honorary gateways were erected in memory of deserving servants of the state and virtuous women. Widows, who did not remarry after their husband's death, and who faithfully nursed their parents-in-law, were entitled to this honor; likewise children for unusual acts of filial piety, persons who had reached the age of one hundred, and statesmen for loyal devotion to the throne. If such a canonization was recommended, the emperor, on receiving the petition, issued a "holy edict," which was chiseled in stone on the top of the monument, and he contributed the sum of thirty ounces of silver. The balance of the cost was subscribed by the family of the honored person or by the grateful community. The ideal purpose of these gateways, accordingly, was to perpetuate to posterity the memory of excellent men and women and to act as an influence on the conduct of the following generations.

The number of openings or passages in gateways is usually three, as in the gateway of the Museum, while more rarely five arches occur. Such may be seen, for instance, on the tomb of Confucius in Shantung or on the avenue leading to the mausoleum of the Ming emperors, north of Peking. Marble, granite, sandstone, and wood are employed for gateways. Wooden structures, as a rule, are less elaborate than those of stone. The gateway shown in the Museum is a very exact reproduction in teakwood of one in stone, with all the rich details of ornamentation.

The harmonious construction, the ingenious composition, the pleasing proportions, and skill in workmanship, are notable features. The four pillars are each adorned with a powerful, scaly dragon, rising from the depths of the sea heavenward into clouds and making for a flamed pearl: the aspiration for an ideal that is set before man, but that can never be reached. The pedestals carry figures in the round of lions playing with their young; altogether forty-two lions are represented. It is remarkable that each and every lion is different in posture and action. Some are provided with collar-bands and bells; some have their manes rolled up in spirals,

while others have two bearded tips. In some, the eyebrows are conventionalized into spiral designs; in others, they hang over the eyeballs. In the two corners is represented a drum on each side of which are shown three lion-cubs chasing a ball.

A great deal of symbolism is connected with the lion. The Chinese recognize him as the king of all beasts, and his roaring dispels phantoms. Under the imperial régime, the Grand Preceptor of the emperor and his assistant occupied a high rank among the state-officials. for it was the duty of these functionaries to inculcate in the heir-apparent the maxims of good government and conduct. Being called t'ai shi ("grand preceptor") and shao shi ("small preceptor"), a pun was easily suggested by the designation of the lion, which likewise is shi. Thus the representation of a large and a small lion intimates the wish, "May you obtain the position of the first and second dignitary at the imperial Court!" Again, the lions engaged in playing ball symbolize the peace and prosperity of the empire. In this case, the lions represent military officers, who are not obliged to go to war, but who indulge at home in the harmless sport of ball-playing.

The inscription, consisting of eight gilded characters (four on each side) and set off from a diapered background, reads,—

"Your merits shine like sun and moon,

"Your good deeds vie in extent with streams and mountains."

This panel is bordered by a pair of dragons on the upper and lower sides and by the figure of a phœnix to the right and left.

The principal and most conspicuous portion of any Chinese structure is the roof. In a private mansion, it is the index of the owner's taste and social standing. In a public building, it indicates at once its peculiar character; and, according to the simplicity, grandeur,

massiveness, vigor, or elegance of construction, as the case may be, foreshadows its scope and importance. Color symbolism expressed by the hues of the glazed tiles is another means of identification. In the gateway, each passage is surmounted by a roof of its own, the three roofs being so organically connected that the impression is conveyed of a double roof. The graceful, picturesque curves on the corners ("flying eaves," as they are styled by the Chinese) are each surmounted by four lions, believed to be faithful guardians and to ward off evil influences from the monument.

The roof is supported by eight struts (four on each side), carved into the appearance of bamboo stems with exuberant foliage. Rafters and tiling are so skilfully brought out in the woodwork as to inspire a perfect illusion. Sixteen carvings of figures in the round are displayed over the roof: they represent military officers, eight on horseback, and eight on foot, each in full armor, equipped with spears, halberds, clubs, and other weapons, and attended by footmen holding flags.

The ridge-pole is adorned with a panel carved in open work with two dragons struggling for the flamed pearl, and surmounted by a calabash. The latter is an emblem of the creative power of nature, of fertility and abundance (corresponding to our horn of plenty). The Taoist adepts used calabashes to store the elixir of immortality, and druggists preserve their medicines in them or in gourd-shaped vials. The ridge-poles are flanked by dolphins, head downward and tail upward, the belief being entertained that they safeguard the structure from conflagration. The wooden balls supported by wires are intended for water bubbles rising from the clouds by which the dragons are enveloped.

In the dragon-columns the favorite personages of Taoist mythology are represented. On the two inner columns we note the so-called Eight Immortals, bestowing on mankind old age and all sorts of blessings: Chang Kuo with his magic wand capable of fulfilling his every wish; Ts'ao Kuo-k'iu with his castanets, by means of which he performs magical feats; Chung-li Küan with his fan; Han Siang-tse blowing his flute; Lü Tung-pin with a magic fly-whisk and sword on his back; the beggar Li T'ie-k'uai with a calabash full of blessings; Lan Ts'ai-ho with a flower-basket; and the fairy Ho Sien-ku with the stem of a lotus, the sacred emblem of purity. Compare the two sets of bronze images of the Eight Immortals in Blackstone Chinese Collection, Case 21.

On the two outer columns are portrayed two Taoist sages or hermits, one shouldering a branch with peaches. which ripen but once in three thousand years in the paradise of the goddess Si Wang Mu, and which confer immortality on the adepts of Taoism, and two fairies with miraculous fly-brushes. It was the belief of the Taoists that contact with nature, a contemplative life in the solitude of mountains, is conducive to purification, old age, and speedy salvation; in this manner the soul ultimately is capable of soaring heavenward on the wings of a crane. Thus we see two recluses astride cranes carried upward at the end of their earthly career. the lower portions of the outer pillars are figured the gay twin genii of Union and Harmony; one, holding a covered jar from which emanates a tree covered with money: the other, a lotus. These emblems are suggested by punning, both the lotus and a jar being called ho, and two other words ho being expressive of the notions "union" and "harmony."

Other Taoist symbols are illustrated in the panels on the pedestals. One of these shows a crane soaring in clouds above a pine-tree,—both being symbols of endurance and longevity—and a deer, which is emblematic of high official dignity and good income. Another represents a phenix alighting upon the beautiful Wut'ung tree (Sterculia platanifolia), famed in legend and art, and the unicorn Kilin, the emblem of perfect good, that appears only at the birth of a virtuous ruler.

The high-relief carvings that decorate the horizontal lintels above the passages carry us back to realistic scenes of human life. They are arranged so that warlike scenes are assembled on one side of the gateway. while representations of peaceful pastimes occupy the opposite side. The main themes of the artist are tournaments of ancient paladins, thrusting halberds or spears at one another in front of a city-wall, from the rampart of which other grandees eagerly watch the spectacle. Or a cavalier turning backward on his galloping steed sends an arrow at his adversary, whose helmet is pierced by it, while tents surrounded by standards lend color to the background of the military action. The genrescenes depict the tribunal of a high official, old men enjoying themselves in a grove, a lady travelling in a push-cart and escorted by mounted lancers, or a monk conducting a dignitary to the gate of his temple, which bears the name "Temple of Sweet Dew" (Kan-lu-se).

There are altogether twenty-two corbels, sixteen being decorated with designs of a phœnix, and six with interesting scenes describing the pastimes of cultivated gentlemen of leisure, as follows:—Feeding ducks, enjoying a cup of wine in a grove of pine-trees, writing a poem on a rock, painting a bamboo sketch on a scroll, reading in the woods at a table formed by a bowlder, playing the lute, dancing around a rock, taking a stroll in the company of a youth, who carries a pot of peonies, playing checkers on a stone board, planting flowers in a bed, examining the growth of plants, going a-fishing with a long rod over the shoulder.

It will thus be seen that the art displayed on this gateway is a marvelous embodiment of Chinese life and thought, a record of cosmogony and mythology, of heaven and earth.

The gateway is carved from teakwood, being 19 feet in height and 16 feet 9 inches in width. It was made in the Chinese Orphanage of Sikkawei, a Jesuit institution, near Shanghai, and was first on exhibition in the Palace of Education at the Panama Pacific International Exposition of San Francisco.

B. Laufer



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PHILIPPINE FORGE GROUP

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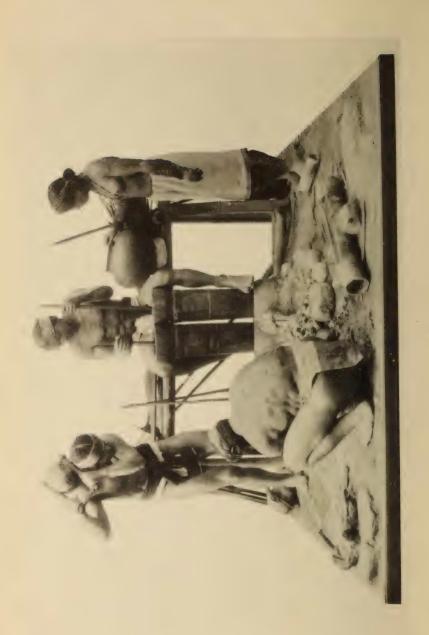
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FIELD MUSEUM OF NATURAL HISTORY

CHICAGO 1922







FIELD MUSEUM OF NATURAL HISTORY DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1922

LEAFLET

NUMBER 2

The Philippine Forge Group

(Hall 9, Case 21)

The finest headaxes and spear-points made in north-western Luzon (Philippine Islands) come from Balbalasang and the other villages of the upper Buklok, or Saltan river, just at the boundary between the Tinguian and Kalinga tribes. It is of interest to note that in this and in other more or less isolated districts of the Philippines we find the peculiar method of iron-working, which is here described, while along the coast it has vanished, or is of little importance.

The same condition is found in Assam, Burma, Eastern Madagascar, Sumatra, Java, Borneo, and other islands to the east, making it evident that iron-working was an ancient art throughout Malaysia, and that it spread from a common center.

The Tinguian iron-workers do not mine or smelt the native ore, although there is an abundance in their territory, but secure the metal from Chinese traders on the coast. In view of the fact that many of the pagan tribes of the islands to the south do now, or did until recently, smelt the ore, it seems altogether probable that the Philippine tribesman also had knowledge of the process, but gave it up when trade relations made such arduous work unnecessary.

The forge here illustrated comes from Inalagan, one of the small settlements which makes up the community of Balbalasang ("the town of many maidens"). It stood in a small structure with grass roof, but without sides or floor. At one end of such a structure is a bamboo

bench, in front of which stands the bellows—two upright cylinders made of logs hollowed out. In each of these is a piston or plunger, at the lower end of which is a wooden ring packed with corn husks and chicken feathers. When a plunger is pushed downward in the cylinder, it compresses the air and forces it out of the small opening in the base, but when it is drawn up, the packing collapses and allows it to be raised without effort. These pistons are worked alternately so that one is rising, while the other is falling.

Two bamboo tubes, attached to the bellows, conduct the air into a cylinder of fire clay, and this in turn carries it into the charcoal fire. These bamboos fit loosely into the clay cylinder, thus taking the place of valves and preventing the drawing of the fire back into the bellows.

Near to the hearth is a stone anvil, while a heavy stone hammer, a small stone hammer, and pinchers of the same material complete the outfit. The fire is lighted, and the operator sitting on the bench raises and lowers the plungers in the cylinders until the fire burns brightly; then the smith puts the metal into the coals. and allows it to remain until it reaches a white heat. It is then removed and placed on the anvil, where his helper beats it out with the large hammer. stone weighing twenty or more pounds, fitted inside the handles, so that it can be used with both hands. rule, it is swung between the legs, and is allowed to strike the metal as it descends, but some of the men raise it above the shoulder and strike a much more powerful blow. If two pieces of metal are to be welded together, as is often the case when broken cauldrons are used, they are laid one overlapping the other, and are held together with damp fire clay. In this condition they are placed in the fire and heated, being then

beaten together. It often takes several firings to bring about a perfect weld.

After the initial shaping, the smith completes the work with the small hammer, and the blade is again inserted in the fire and brought to a white heat. Then the smith withdraws it and watches it intently, until the white tone begins to turn to a greenish-yellow, when he plunges it into water. The tempered blade is now smoothed down with sandstone, and is whetted to a keen edge. Headaxes, spear heads, adzes, a few knives, and the metal ends for the spear-shafts are the principal products of the forge.

The blades are by no means of equal temper or perfection, but the smiths of the Tinguian-Kalinga border villages seldom turn out poor weapons and, as a result, their spears and headaxes have a wide distribution over northwestern Luzon.

The material and data for this group were gathered by F. C. Cole in connection with the Robert F. Cummings Philippine Expedition during the years 1907-08. The modeling is the work of Clyde Gardner.

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F. C. COLE.



JAPANESE COLLECTIONS

(FRANK W. GUNSAULUS HALL)

BY

HELEN C. GUNSAULUS
Assistant Curator of Japanese Ethnology

No. 3



FIELD MUSEUM OF NATURAL HISTORY

CHICAGO







BRONZE BUST OF DR. FRANK W. GUNSAULUS.

FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1922

LEAFLET

NUMBER 3

PREFACE

In the premature death of Dr. Frank W. Gunsaulus this Institution has lost a devoted trustee and one of its warmest friends and most eloquent spokesmen. his universal understanding and breadth of sympathy he has been a vital source of inspiration to the Department of Anthropology in particular. His many gifts to the museum testify to the wide range of his interests, his artistic taste, and his discriminating judgment. The oriental collections were enriched by him with two valuable Chinese embroidered panels, a precious rosary of amber beads. Persian glazed tiles, a celadon flowervase, and a remarkable ethnological collection from the aboriginal tribes of Formosa, which is unique in this country. Above all, however, his interests were directed toward Japan. He indeed it was who made the first substantial contributions to the foundation of a Japanese division. An exquisite painted screen of the Tosa school, an extensive collection of swordguards and sword-fittings, as well as a collection of books on Japanese art, belong to his prominent The collection of surimono, presented last bequests. vear by his daughter in her father's memory, was brought together by her with his invaluable assistance. His profound interest in the achievements of oriental nations was not purely academic, but he was also actuated by a strong desire for a better understanding between America and Japan and an earnest striving toward the realization of world peace.

It may not be amiss to place on record here some paragraphs extracted from an article devoted to the

Field Museum by this extraordinary man (*Chicago Record-Herald*, 4th of February, 1912). At that time the site for the new building was not yet decided upon, and his utterances are almost prophetic:—

"Among the first four of the larger and richer assemblages of those objects which make for the education of the world-man along scientific lines, the Museum itself imposes upon the city, the state, and the nation a demand for such a location as will insure for it the leadership of the educative forces in these directions, not only for Chicago, but for the whole country.

"It is not as if a tremendous library were to miss its end and aim in popularizing intelligence—for books can be loaned and circulated, and books can be printed and reprinted by the thousands;—it is not as if some superior collection of jewels, either in painting, sculpture, architecture, or some temple of music or eloquence shall be placed, where the common people may not partake of its beneficent culture! Perhaps the coming man may be able to do his work as a thinker and as a creator of new and valuable things, without so much of these.

"But the scientific method is the method of the future. The art and power of thinking along the lines of nature and history are of the highest in value. The secret and mastery of classification, such as the merest child may comprehend in visiting this Museum—these are of critical importance to the mind of the future. Man's past in nature and in the history of his efforts at creating society—these are the tremendous and unfailing background which must be taken into the mind of the coming man, or he will have no foreground! Retrospective and prospective in human thinking and doing are vitally correlative. The Field Museum is indeed our crown, and we must all agree that the center

and consummation of our educational life which touches the poorest child and will exalt the richest, shall be located so centrally and so magnificently that it will attract all our men, women, and children unto it!"

In recognition of his great services, the Board of Trustees has resolved to name the two rooms sheltering the Japanese collections "Frank W. Gunsaulus Hall." At the instigation of the President and the Board of Trustees, a bronze bust of Dr. Gunsaulus, modeled by J. G. Prasuhn, has been placed in this Hall. A reproduction of this bust appears as a frontispiece to this publication.

B. LAUFER

The Japanese Collections

The collections in Frank W. Gunsaulus Hall (Room 30, on the second floor, south-east corner) are intended to illustrate certain phases of the social and artistic life of Japan, and, for the most part, are typical of the period known as the Tokugawa (1603-1868), so called from the family name of the shoguns or military commanders, who ruled over that country from the seventeenth to the middle of the nineteenth century. When Japan opened her doors to the world in 1868, she had been dwelling in seclusion for over two hundred years, admitting no foreigners save a few Dutch traders, who were allowed to land an occasional ship at the port of Nagasaki in the seventeenth century. The main portion of the country had been untouched by European influence during that time.

After centuries of internal strife, the mode of living changed very considerably in the peaceful Tokugawa period, and all life took on a richer and more leisurely aspect. The arts and especially the crafts were developed to a marked degree. Such pastimes as poetry writing, the tea ceremony, and flower arrangement, filled many of the hours of the leisure classes.

The shogun was at that time so powerful and dwelt in such grandeur that many of the early travellers and possibly our own Commodore Perry, who landed with his fleet on Japanese soil in 1853, thought him to be the real emperor. At any rate, the signature which seals the treaty of 1854 is that of the shogun, and reads Tai Kun ("Great Lord").

From the days of her first sovereign, who is believed to have descended from the Sun Goddess, Japan has been a monarchy, acknowledging one supreme ruler, her emperor. In reality, however, the country was a duarchy from the end of the twelfth century on to 1868. While the emperor dwelt in luxury and seclusion in Kyoto, the powerful generals, who subdued the warring tribes in the north and west, gathered unto themselves all of the military forces. In time, the strongest of them became the shogun, military master of the whole country, establishing his court at first at Kamakura, and later at Yedo, the city now called Tokyo.

Centuries of constant warfare evolved a feudal system of elaborate organization, which was presided over by the shogun. Under him were the daimyo, feudal lords who were masters of provinces, each practically a chief over his own small kingdom. The daimyo were supported by armed retainers, known as samurai. These men were the scholar-gentlemen of Japan, privileged to wear two swords, forbidden by custom from engaging in business, living within the precincts of the daimyo's castle, and supported by their feudal lord, for whom they were ever ready to fight and to lay down their lives. It is estimated that there were two millions of samurai in 1877. The military men and the nobles of Kyoto together formed the governing class. The producing class, comprised of the farmers, artisans, and merchants, was sharply separated from the governing class, who ruled over them, and who were supported by them.

Under the Tokugawa shoguns, all daimyo were required to make an annual visit to Yedo, the city chosen in 1590 for the capital of the shogun. This gorgeous procession has been the theme for many painters and makers of color prints. The horse trappings and armor, the banners and ornate bows and arrows, as well as the highly decorated swords, combined to make an admirable showing of color, as they swept by the kneeling and prostrate commoners.

The two currents of influence which have left the deepest marks in the character of the Japanese nation are her military history and her intercourse with China.

In A.D. 552 Japan received the Indian doctrine of Buddhism from Korea, which, on its part, had adopted With the incoming of this novel it from China. philosophy and religion, there was added to the long list of gods and goddesses of the old Shinto creed (mainly based on the worship of nature deities and ancient national heroes) the Buddhist pantheon. At the same time and during the succeeding centuries, Japan, with her remarkable power for assimilating new ideas, introduced from both China and Korea artisans adept in every branch of art. These brought into the country not only their skill, but also the customs, ideas, and literature of the continent. Up until the sixth century, Japan had no system of writing; and the adoption of Chinese script resulted in the introduction of the folklore of China, evidence of which may be traced in many of the legends spoken of as Japanese. In A.D. 645 the Japanese court was organized on the lines of that of China. In the seventh century, Buddhist temples were built and filled with Chinese and native sculptures of Buddhist deities. Painting in the tenth century took on a distinctly Japanese style; for the national spirit was rising, and the people was determined to develop a school of art, that would be a characteristic expression of its own ideas. This school was known as the Yamato Ryu ("Japanese school"), and later became the Tosa school. However, a revival of Chinese influence and a refreshment of Chinese inspiration swept over the artistic world of the country in the fifteenth century; and from this movement emerged such masters of landscape as Sesshu and the Kano artists, and such exquisite customs as the tea ceremony, which was





SURIMONO (COLOR PRINT) REPRESENTING SELF-PORTRAIT OF HOKUSAI AS A FISHERMAN.

developed into a ritual of almost religious character. In the peaceful years of the Tokugawa period, the crafts came into their own; for this period was one in which people had time for beautifying the objects of daily life. The process of lacquering, the craft of working in metal, and the making of wood-block prints are three branches of industrial art in which the people of Japan excel. The two last-mentioned are well illustrated by examples in Gunsaulus Hall.

In the smaller room, there is on view a portion of the collection of prints presented to the Museum in 1921 by Helen C. Gunsaulus in memory of her father, Dr. Frank W. Gunsaulus. One-fourth of the entire collection is shown at a time, being replaced every two months by a new selection. The larger part of the collection is in Room 51, where, on application, it may be seen by interested students. For exhibition purposes, the entire collection has been divided into four groups, each illustrating a well-defined subject, as follows:—

- 1. The art of Hokusai and his followers.
- 2. The New Year's festival, games and pastimes.
- 3. Gods and heroes.
- 4. Architecture and the home.

All of the prints in this collection belong to the class called *surimono*, a name given to cards of greeting for special occasions, such as New Year, birthdays, and meetings of poets and artists. This art flourished between the years 1780 and 1860,—that period known as the Japanese renaissance, when the minor arts were at their best. These prints were produced for private circulation and not sold, as was the ordinary print, which was made mainly for the shopkeeper and peasant. Surimono were the charm and delight of the literary and artistic world, and were presented as souvenirs to a limited group of friends. The process by

which they are made is the same as that employed in the making of the ordinary print, with the additional use of metal dusts: copper, silver, and gold, used to heighten the elegant effect of brocade. They are also enriched by embossing, which in many cases brings out the design of fabrics, waves, clouds, feathers, flowerpetals, or the rounding of a figure.

The method of producing them is as follows: The picture is first painted by the artist and pasted face downward on a block of cherry wood, whereon the carver cuts the picture in outline, making what is called the key-block. This block is then applied to a soft and delicate rice-paper, and the picture is printed in outline in black. The colors are applied by separate blocks, each color denoting a block. (See Hall 24, Case 48, illustrating Chinese and Japanese printing.) It will be noticed that in the surimono the registration of the blocks is very accurate; seldom do we find one color overlapping another. Surimono are the perfection of color printing, technically.

Generally accompanying the designs on surimono are poems (uta), which usually are subtle interpretations of the subject pictured. The artists are, for the most part, those known in the print world, though Gakutei and Hokkei are known almost exclusively for their exquisite surimono. The latter was a pupil of Hokusai, the great artist of the nineteenth century, whose prints, as seen here, testify as to his mastery of the brush in figure drawing and his deserved reputation as a great landscape artist. He and his followers may be studied from the first group of surimono.

All these prints are valuable documents in the study of certain customs and practices, particularly those in the second group which includes surimono illustrating the toys, games, and musical instruments, as well as the



SURIMONO (COLOR PRINT) ILLUSTRATING PROCESS OF WOOD-ENGRAVING.



most important of Japanese celebrations, the New Year's festival.

Of the many festivals in Japan, that of the New Year is the most widely celebrated, attended as it is with elaborate ceremonies. It takes place, as with us, at the beginning of the year, though according to the old calendar it was celebrated a month or more later, when the plum began to blossom.

It is customary to begin the New Year by watching the sunrise. Most auspicious is it to see the Sun Goddess coming from the cave, as is typified by the sun rising between two rocks known as Myoto Seki on the Futami shore. Between these is stretched a straw rope (shimenawa), one of the most outstanding features of the New Year. It is made of twisted rice-straw with pendants at regular intervals and decorated with fern fronds (growing in pairs and signifying conjugal happiness), leaves of the yuzuriha (a plant which retains its old leaves as the new ones bud, signifying a long united family), a lobster (with bent back, signifying age), and strips of paper known as gohei. In each household, these same objects are to be seen grouped on a red lacquer stand (sambo) on which are also placed rice dumplings (mochi) of various forms. The pine, bamboo, and plum (shochikubai), all emblems of longevity, are used over and over as decorations.

It is believed that all evil influences are driven out of the house by the ceremony of throwing dried beans into every corner (oni yarai). After the beans are swept out, a small charm consisting of a spray of holly with a sardine's head is fixed to the upper corner of the entrance to prevent the demons from re-entering. The writing of poetry, the reading of a book, the first music lesson, calling on friends, presentation of gifts, all are indulged in on this day. On the third day, the mochi

are chopped and eaten. On the seventh, the seven spring grasses (nanakusa), which have been gathered by the young girls, are chopped to a certain incantation and then cooked together. On the fourteenth day, the pine and bamboo sprouts placed at either side of the doorway are burned, and thus closes the celebration of a festival of which this is merely a brief outline.

Two prominent features of the New Year's celebration are the many-formed and elaborate kites which are flown the first half of the first month by the boys, and the battledore and shuttlecock sets which are the pride of the girls. The battle boards, often of excellent workmanship, are made of fine kiri wood and padded on one side with bright silks into a raised portrait of a famous actor or hero in history. The shuttlecock is made of the seed of the soapberry (mukuroji) plumed with five feathers at one end. The penalty for letting the shuttlecock touch the ground is a black smudge on the face.

Dolls, stilts, balls, and ropes are used much as in our own country, though boys do the rope jumping, and girls play with the hand ball and show great dexterity in catching it, as they pirouette between striking it downward to the ground. Ropes are used in different tests of strength, waist pulling or neck pulling with a loop of rope as the medium. The games represented in this series of surimono are as follows:—

Go, the most popular game of the Japanese, played upon a board with nineteen straight lines crossing one another, at right angles, making 361 crosses on which the game is played. There are 180 white and 181 black stones used in the playing.

Sugo-roku ("double-sixes") is backgammon played

with dice. The board upon which it is played in surimono No. 151513 is now out of use.

Juroku-mushashi ("sixteen knights") played on a board marked in diagonally cut squares, with sixteen paper pawns.

Kai Awase. A set of 360 clam shells, one-half bearing a picture of a poet to be matched with the other half bearing a poem.

Uta garuta ("poem cards"). A set of forty-eight on half of which are the first two lines of twenty-four poems, on the other half the last two lines.

The gathering of shells, the viewing of blossoms, and the listening to singing insects are all delightful pastimes of the Japanese, being occasions of organized parties in which men, as well as women, enjoy themselves.

The accomplishments of a cultured person include the arts of painting, writing of poetry, caligraphy, music, flower arrangement, and the tea ceremony. The two last-named are outlined by stringent rules, and have for many centuries been held in high esteem, many different schools devoted to these two arts being in existence.

The third series of surimono illustrates certain of the household gods and several of the heroes of Japanese history and folk-lore. The story of Amaterasu, the Sun Goddess and heavenly ancestor of the Japanese rulers, is illustrated by three prints on the north wall. The legend of the Sun Goddess' retirement into a cave, with the consequent darkening of the whole world, is probably a primitive explanation of a solar eclipse. She was lured forth from the cave by a dancer with an assembly of musicians and gods, who are here represented by a drummer and one of the divinities.

The Seven Gods of Good Fortune (Shichi-fuku-jin) are to be seen in every household in Japan, and appear in certain prints on the south wall. They are derived from Brahmanism, Buddhism, Taoism, and Shintoism. They may be seen associated in one print, where they are having a New Year's feast. Fukurokujiu, with the tall head, is the god of prosperity, longevity, and wisdom. Daikoku, with the rice bales and magic hammer, is the god of wealth. Ebisu, with the fish, is the patron of fishermen, while Hotei, with a large bag, is the friend of children. Bishamon clad in armor, though reverenced by warriors, is a god of wealth. Juro Jin, an old man with a staff and scroll, is also a god of longevity and wisdom. Benten, the only female of the group, is the goddess of eloquence and talents.

The pictures of heroes are interesting, not alone for their story-telling qualities of thrilling feats of bravery, but more especially on account of their true delineation of the arms and armor worn by the warriors of old Japan. The two swords, carried by all samurai or warriors, appear again and again, as do also spears and halberds. The latter are of various forms, straight and forked, and generally held by a carefully decorated hand-piece. Battle-axes are also evident, and, in the case of the older warriors, quivers full of arrows are suspended from the left shoulder. An interesting weapon of ancient days is being effectively used by a woman, Tomoye Gozen, in a print shown on the south wall. It is called kusari-kama, that is, "chained hoe." Attached to the shoulder, the sickle-shaped knife was flung at the adversary and pulled back by means of the chain. The armour is all of the old type, made of laminae of iron or lacquer laced together with silken braid, and decorated on the breast plate, shoulder, and hip pieces with precious metals. The helmets are elaborate and surmounted by gilded horns or wings.



SURIMONO (COLOR PRINT) REPRESENTING DAIKOKU, ONE OF THE SEVEN GODS OF LUCK, SMOKING A TOBACCO-PIPE.



In the fourth selection of surimono one is enabled to study examples of the architecture of Japan: the peasant dwellings with thatched roofs: the city house with its sliding screens (shoji) showing the garden beyond; certain temples whose entrances are heralded by tall gates (torii), and little tea-houses met with as the traveller goes through the country. The interior of the Japanese house may also be glimpsed into, for in these little prints we see the maiden at her low writing-table composing a poem or seated on the floor arranging her coiffure by the metal mirror, the housewife preparing the tea, or smoking her pipe by the brazier (hibachi). Household lanterns, screens, sliding and folding, potted plants on lacquered stands, low tables for writing or holding the lacquered and porcelain dishes, are all pictured; and one recognizes the simplicity and artistic restraint of the house in the very absence of the cluttering objects and bric-à-brac, which fill up the average home of Europe and America. The Japanese house is almost purely Japanese, untarnished by outside influence, even that of China, the country from which so much has been borrowed, but whose methods in this respect have been sparingly adopted.

In the larger room, Cases 1 and 2 contain examples of metal work, being accessories and ornaments used on the sword. This collection was presented to the museum by Dr. F. W. Gunsaulus in 1916; other specimens are in the study collection in Room 51. The examples in Case 1 are mainly of iron, dating from the sixteenth century onward. The flat disk-like objects arranged on the shelves are sword-guards (tsuba), which are inserted between hilt and blade, thus affording a protection for the hand during fighting. The smaller objects on the base of each case are ornaments for the hilt and scabbard, as illustrated on the fully equipped weapons set up below.

During the many centuries of wars, the samurai, who were two swords in his belt, had grown to look upon this weapon as his dearest possession: it was indeed "his living soul." On entering a house, the long sword (katana), with which he defended his lord in battle, was laid upon a rack near the door (katana kake). The shorter sword (wakizashi) was always carried in his belt. This was his most prized possession. With it he would take his own life rather than suffer the disgrace of being killed by an enemy, or, as often was the case, would follow his feudal lord in death, or commit suicide, in order to uphold and proclaim certain principles or to raise a protest against unjust political measures. The suicide which was performed with this sword was called harakiri or seppuku. It was a fatal crosscut amounting practically to disembowelment, and was performed with a staunch bravery and self-abnegation characteristic of the samurai.

The smaller sword is often more elaborately decorated than its larger companion. It is accompanied by two smaller weapons,—a knife (kozuka) and a skewer (kogai), both of which pass through the sword-guard and slip into openings on either side of the scabbard. The handles of these objects are always decorated, as may be seen in studying those specimens arranged on the floors of the cases.

From the sixteenth century on, many artists devoted their entire energy to the beautifying of the sword. At first, plain iron was used for the fittings; but subsequently artists like Kaneiye, Nobuiye, and the early Goto masters, created their guards with reliefs of precious metals. Other styles of decoration developed, until in the eighteenth century, when peace was established throughout the empire, the sword had lavished upon it workmanship equal in technique to that of



SWORD-GUARDS (NINETEENTH CENTURY).

TADAMORI, ON A RAINY NIGHT, MISTAKES AN OLD PRIEST FOR A ROBBER.

CRANES ARE RELEASED WITH GOLDEN CARDS ATTACHED TO THEIR LIMBS.



many of our famous jewelers. In fact, the sword took the place of jewelry, which was unknown to the samurai.

Alloys were compounded of indescribable colors; the dark blue of the alloy called *shakudo* and the varying grays and greens of *shibuichi* combined to make a palette from which many of the eighteenth and nineteenth century artists literally painted in metal. There arose schools of metal-workers whose products will ever remain to do them honor,—particularly the Nara, Hamano, Omori, and Ishiguro schools, all of whom are represented by examples in Case 2. The subjects of decoration range through historical incidents and legends to bits of nature, such as the simple, but striking motives chiselled in open work on the iron guards in the center row of Case 1.

In the Tokugawa period, the serious duties of the samurai were almost banished; and his hours which had been devoted to war and conquest were given over to the leisurely pastimes of artistic and literary pursuits. The armor and swords of that day were made for adornment rather than for fighting. The yearly processions of the daimyo to Yedo, whither they were required to come by the shogun's order, were occasions on which the armed retainers, in full regalia, reflected the elegance of their chief's domain.

In Case 3, the pair of large bows and the quiver with the gilded leather mountings are typical of the luxurious accourrement of those days. The crest impressed in black is that of Nabeshima, the powerful daimyo of Hizen Province.

In Cases 3 and 4 are suits of armor, likewise of the Tokugawa period, which represent the fighting equipment rather than the armor worn on parade occasions. As there were only occasional border raids to disturb

the peace of those times, there was little use for defensive armor. These suits are typical examples of a decadent craft, for compared with those of earlier date, when fighting was a glory, they are decidedly inferior.

In the large tapestry on the north wall of this room. a group of warriors in full regalia head a large procession on their way to the consecration of the famous temple in Nikko which is dedicated to the first of the Tokugawa shoguns, Ieyasu. This remarkable piece of handicraft embodies a minute and exact record of the carvings of those famous shrines, and the red and gold threads reproduce to an extraordinary degree the red and gold lacquer, which, with the colored carvings, have brought forth the proverb, "Do not use the word magnificent until you see Nikko." This tapestry affords an excellent opportunity to study costume of the seventeenth century: for here are heralds, samurai. daimyo, standard bearers and lance bearers, actors, courtiers, musicians, and commoners, all moving in procession across the scene. Of especial interest are the portable shrines decorated with metallic mirrors. birds, and hangings, which are being carried on the shoulders of a hundred men. One may be seen on the central stone steps, while the other is half hidden by the tree at the left.

In the center of this hall there is a case (No. 9) in which one of the five seasonal festivals is represented, the one known as the *hina-matsuri* ("dolls' festival"). This celebration occurs on the third day of the third month, and is a time beloved by each little girl of Japan. On a series of shelves covered with red cloth, she will arrange her set of dolls, often heirlooms handed down from grandmother to mother and on to the daughter. Seated before a screen are to be seen the emperor and empress, with the old and young court ministers and the five court musicians. Also other

historical characters are sometimes added to this group. Before them the girls are accustomed to place, with deep reverence, offerings of food and *sake*, the well-known rice wine. The dolls remain on view for a week, after which they are carefully packed away until the following year.

In Cases 5 and 6 the costume of the Japanese woman of the present time is on view. These robes are those worn by women of the upper classes, typical costumes of the wives and daughters of samurai. The peasant costume and the old court costume distinctly differ from these. The wide sash (obi) and the elaborate modes of dressing the hair were products of the Tokugawa period, again reflecting those luxurious days. The sash of earlier times was merely a cord or an unpretentious belt. It became, after the seventeenth century, the most important article of a woman's wardrobe. Generally, five and a half yards long, often of rich brocade with gold threads (such as on one of the figures), it is wound tightly around the waist, thus forming a support. It is then tied in a complicated knot or bow. Two styles of knots are here shown: the flat one, used by married women, and the more elaborate butterfly bow, worn by the maiden. The dressing of the hair is likewise an indication of the woman's position. Made stiff with oil, the wife's hair is arranged in a single large puff, while the unmarried woman wears two loops,—a large one in front and a smaller one behind. The street mode is again a different type. Two puffs, one on either side, are held in place by a roll of silk which passes through them.

The robes (*kimono*) shown on the three figures are typical garments for winter, summer and street wear. All are of silk, two being embroidered in flowers appropriate for the seasons.

Case 7 contains some examples of carvings in wood and ivory. The wooden masks on the top row are the type worn in the No drama,—a classical dance accompanied by choric songs relating ancient historical or religious stories. The carved ivory sword in the center is a very excellent specimen of a purely ornamental weapon used probably for parade purposes.

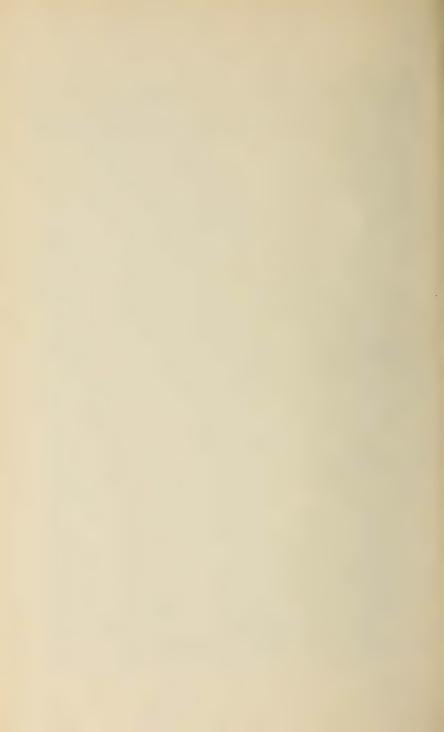
In the lower part of this case there are some Buddhistic images, two of these representing Çakyamuni, the founder of Buddhism; and the third, Kwannon, the goddess of mercy, a deity widely beloved in Japan. The miniature shrine is a good example of the type set up for use in a household.

Case 8 contains musical instruments, among others some of the different forms of the lyre (koto). This popular instrument was gradually evolved from Chinese models, as were also the violin (kokyu) and the reed organ (sho).

On the west wall of the room there is a foldingscreen painted by an unknown artist of the Tosa school, probably in the fourteenth or fifteenth century. This screen was presented by Dr. Frank W. Gunsaulus in honor of the twenty-fifth anniversary of Dr. Skiff as director of Field Museum of Natural History. The painting is of interest both for its subject matter and because it combines the predominant characteristics of this important school of painters, who were the exponents of a purely national style. The artist has depicted three scenes from the famous novel, "Genji Monogatari," a romance of Prince Genji, written in the eleventh century. The court costumes of heavy brocade, the lacquer objects, and musical instruments are painted with extreme care. The innovation of omitting the roof from buildings in order to see the interiors and the employment of golden clouds to blot



THE SCENE REPRESENTS PRINCE GENJI AND TO-NO-CHUJO DANCING BEFORE THE IMPERIAL COURT. TWO SECTIONS OF A PAINTED SCREEN BY AN UNKNOWN ARTIST OF THE TOSA SCHOOL.



out unneeded detail or separate the scenes one from another, are characteristic mannerisms of the Tosa artists.

In contrast to the Japanese style reflected in the Tosa screen is the scroll exhibited on the south wall of the room. This is a wood-block reproduction of a famous painting by Sesshu, in the possession of Prince Mori in Japan. Sesshu is regarded as the greatest Japanese landscape artist, who painted in the Chinese style. He lived in the fifteenth century and went to China to study her ancient masters and the mountain scenery of that country. On returning he founded a new school whose members painted with vigorous style mainly Chinese sages, birds and flowers, and landscape compositions with illusive effects of atmosphere and distance. The panorama unfolded on this long scroll is the artist's reminiscence of the scenery along the river Yangtse in middle China. It is executed in black and white, as is characteristic of the Chinese school.

At the entrance to Frank W. Gunsaulus Hall there is a model of a Japanese pagoda. In contrast to the pagodas of China, which generally are hexagonal or octagonal, the square form dominates in Japan. As in the case of this model, Japanese pagodas are made of wood, stone not being employed in either religious or domestic architecture.

HELEN C. GUNSAULUS



NEW GUINEA MASKS

BY

ALBERT B. LEWIS

Assistant Curator of Melanesian Ethnology





FIELD MUSEUM OF NATURAL HISTORY

CHICAGO







RELIGIOUS PROCESSION WITH FEATHER MASKS LEAVING THE SACRED ENCLOSURE AT AWAR, NEW GUINEA.

THE JOSEPH N. FIELD HALL

PREFACE

There are few places, if any, less affected by modern civilization than certain islands of the South Seas, especially New Guinea. In the interior of this large island the inhabitants are still living in the stone age as truly as the ancient inhabitants of Europe did in neolithic times. Civilization, however, is rapidly penetrating this region. On the coasts of New Guinea, and in the neighboring islands, the old life is passing away—in many places has already done so—and little or nothing now remains to tell the tale, unless it be in the memory of the older generation.

In 1909 the Museum was enabled under the patronage of Mr. Joseph N. Field, to extend its work into the South Pacific Islands. An expedition, known as the Joseph N. Field South Pacific Expedition, under the leadership of Dr. Albert B. Lewis, spent four years, 1909-13, in the South Pacific, chiefly in the following Melanesian Islands:—Fiji, the New Hebrides, New Caledonia, the Solomon Islands, New Britain, New Ireland, New Hanover, St. Matthias, the Admiralty Islands, and New Guinea. The object of the expedition was to obtain whatever possible, both of collections and information, that would help to illustrate the life, activities, and beliefs of the inhabitants of this region, as they had been when uninfluenced by European culture. The most important result of the Joseph N. Field Expedition is a collection of more than ten thousand specimens. In addition to these the Museum was also able through Mr. Field to acquire some fine old collections supplementing those obtained in the field. Representative exhibits from the different Melanesian Islands, comprising chiefly specimens from these collections, but also including many from other sources, have been installed in the Joseph N. Field Hall. The remainder have been placed where they can be seen and consulted, when necessary.

To supplement the exhibits, it is the purpose to publish short leaflets giving illustrations end explanations of the use of certain objects or groups of objects. No endeavor will be made to treat the subject exhaustively, but by means of illustrations and descriptions the reader will be enabled to picture to himself more vividly and realistically the life of these people. The present leaflet dealing with New Guinea masks is the first instalment of this series.

B. LAUFER.

FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1922

LEAFLET

NUMBER 4

New Guinea Masks

(Joseph N. Field Hall, Cases 13, 42, 47, 85, 88)

The use of masks of different kinds, while not universal, is found in certain parts of New Guinea, especially the central portion, both north and south. The masks are used in different ways and for different purposes. Sometimes their use is for purely comic or humorous representations or in imitative dances, but usually they have more or less of a mysterious or religious significance, in that they are supposed to represent spirits or supernatural beings, who for one reason or another are paying a visit to their friends or worshipers.

Not infrequently the use of masked figures is associated with secret societies, the members of which are in this manner enabled to impose upon the rest of the people for their own selfish interests. In such cases the supernatural element is invoked, and the acts of the maskers are supposed to be sanctioned by the spirits. Even if there is no definitely organized secret society, there is at least a certain group who are on the inside, so to speak, and who are the only ones allowed within the enclosures where the masks are made and kept, and where the preparation for the appearance of the maskers takes place. Very frequently this includes most of the adult male population.

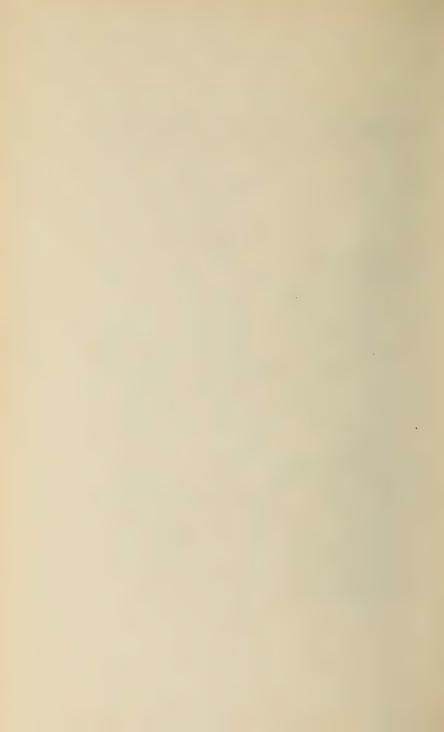
Often several types of masks may be found among the same people. In certain places on the Papuan Gulf, for example, there are at least three types, whose meaning is entirely different. In one case they are used for amusement, and are not in any way secret,

being usually made in imitation of some animal or material object. Another quite different type of mask is worn by the boys, whenever they appear in public, during the period in which they are being initiated into manhood. This period lasts for several months, and during that time they must remain within a special house built for this purpose, being allowed to go out only when they are covered and concealed, with the exception of their legs and feet, by these masks. A third type of mask appears only on the occasion of certain special ceremonies, and represents certain spirits or deities supposed to be present in connection with these ceremonies. In this region all the masks are made of a framework of split bamboo covered with painted bark-cloth similar to the South Sea Island tapa, though not so well made. The three types, while showing great variation within the type, are still quite characteristic, so any masked figure could be instantly placed in the group to which it belonged.

In other districts the masks are quite different, and made in a different way, though there is nearly always a framework of split bamboo or rattan. Sometimes a grotesque head and face is tightly woven of rattan. This may or may not be painted, or covered with mud or clay. On the north coast over a considerable area, the face is represented by a wooden carving. may be a close imitation of the human features, or a grotesque caricature of the same. This mask proper is usually fastened to the framework which covers the head so the bearer can look through the eve-holes. This is true in the case of the large feather masks, where the bamboo frame is very high and covered with feathers. This is probably the most striking of all New Guinea types of masks, and may be regarded as a combination of the mask with the ornamental feather head-dresses used in dances, which are often quite large and elaborate, and also vary greatly in different



MASKS SUCH AS ARE WORN IN IMITATIVE OR HUMOROUS DANCES, PAPUAN GULF, NEW GUINEA.





MASK WORN IN PUBLIC BY BOY DURING INITIATION PERIOD,
PAPUAN GULF, NEW GUINEA.





MASKS REPRESENTING SPIRITS USED ONLY IN CONNECTION WITH SPECIAL CEREMONIES, PAPUAN GULF, NEW GUINEA.



regions. The carved face varies considerably from district to district, some being characterized by huge curved noses, others by long pointed ones, etc. The framework to which the face is fastened and the material with which the frame is covered also vary, feathers being used in only a limited district. Bark, leaves, grass and fiber coverings are also used. Often the leaves are fresh, so it is impossible to preserve the mask as a whole; while usually a certain number of fresh leaves, and often flowers, are added.

The feather masks shown in the frontispiece are among the largest, if not the largest, known to occur in New Guinea. These masks represent local deities, who visit the village on the occasion of certain special ceremonies. There is less secrecy connected with them than with most masks of this type. I had the opportunity of seeing the preparation of these masks. and witnessing part of the ceremonies. There was no objection whatever to my entering the enclosure where the masks were made, or witnessing any of the proceedings, and I could doubtless have seen everything that took place if I had stayed in the village during the whole period. There were many visitors from neighboring villages, who viewed the performance in much the same way that the onlookers would view a modern religious procession in Rome, for example.

The village where this took place is named Awar, and is one of four or five small neighboring villages, all belonging to the same tribe or linguistic group, the total number of individuals probably not exceeding one thousand. The villages are situated on or near Hansa Bay, a few miles west of Potsdam Harbor, on the north coast of New Guinea. The ceremony occurs about once a year, being held in the different villages in rotation, but the people of all the villages attend each ceremony. The preparation of the masks takes several months; for, while the feathers and ornaments are kept from

year to year, a new framework has to be made, and each feather carefully fastened in place.

First a peek-proof enclosure is made in front of and surrounding one of the large men's houses, as there is no special house for this purpose. The enclosing fence is about as high as the masks, and is made of palm or other leaves. Within this enclosure, in the shade of the large projecting front of the house, the frame is constructed, and most of the feathers put in place, but for finishing touches the masks are carefully set up on supports under a special high shed, made for the purpose.

Of course, no important affair ever takes place in New Guinea without a big feast, and for a week or two before the performance everybody is busy collecting provisions. In this all the villages unite, though the main work falls on the entertaining village. Several days are spent in washing out sago, one or two in a big fishing expedition along the beach or in the lagoons. Then there is a big pig-hunt, and often a voyage to Menam or some other place to buy pigs and other provisions.

The village of Awar, where the ceremony was to be held, is made up of a number of houses scattered at intervals along and on both sides of a single street, which in fact is nothing but a native path that has been widened and cleared of vegetation in the neighborhood of the houses. Shortly before the ceremony, frames are erected near the houses along the street, and on these all kinds of food materials are placed, so that everyone may see what an abundance of food is supplied for the feast. This food consists chiefly of great bowls of taro and yams, packets of sago done up in leaves and ornamented with leaf streamers, and even pigs securely bound and fastened to poles, these being supported on forked stakes. Here the things remain, pigs and all, till needed, which may be for



WOMAN DANCING IN FRONT OF THE PROCESSION. FOOD BOWLS AND BASKETS ON RACK AT LEFT, AWAR, NEW GUINEA.



one to several days, depending on the length of time the ceremonies and feasting which goes with them continue, which is usually as long as the food supply holds out.

The masks made on this occasion were four—two large ones covered with feathers, and two small ones covered with leaves, chiefly coconut leaves. The two smaller ones represented two females, Kangai and Gimor; and the two large ones, their sons, Guembe, the son of Kangai, and Korai, the son of Gimor. These have their home in a fine house in the bottom of a lagoon not far away, and visit the village at the time of the ceremony, appearing to the people in the form of these masks.

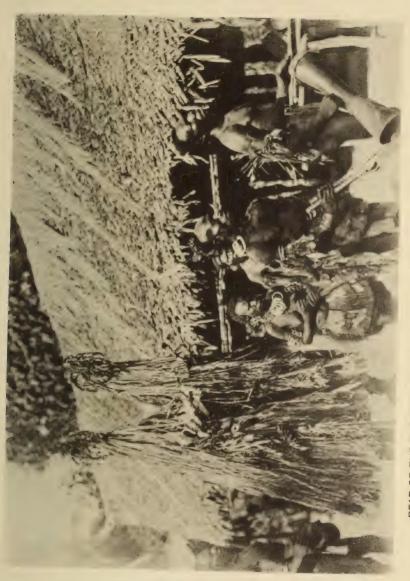
At last the time arrived when the spirits were to appear in the village, and a great crowd of people. young and old, assembled along the street near the enclosure. For some time the big drums or wooden gongs, as well as shell trumpets and hand-drums. could be heard within, when suddenly a portion of the leafy fence was thrown to one side, and the masks and attendants or dancers who made up the procession were seen advancing slowly through the opening. In front were four men in their finest ornaments, then a large mask, followed by three more men; then the second large mask attended in a similar way, and last, the two small masks side by side. The men carried kundus ("hand-drums") or beat two coconut shells together to mark the rhythm of the dance, which was a slow 4/4 movement. First, one foot is advanced slightly, usually considerably to one side, then the other taps the ground alongside, then is stamped down firmly, then a rest; after which the movement is repeated with the other foot, and so on. Meanwhile everybody sings, including the audience. When asked what it meant, they declared it was merely a "sing-sing," and nobody knew what the meaning was. Those in front

would often turn around and face the masks. During the singing of what might be called a stanza there was very little forward movement. After this they would advance a little, sing another stanza, and so on, thus slowly proceeding from one end of the village to the other, and back to the enclosure. As soon as the procession was inside, the opening was closed. Then the masks were removed from the bearers and carefully placed under their sheds. The other performers removed their special ornaments, and all retired for a rest till meal time. The whole performance lasted from one to two hours, and was repeated twice a day, weather permitting, in the early forenoon and late afternoon, as long as the spirits remained in the village (while the food supply held out).

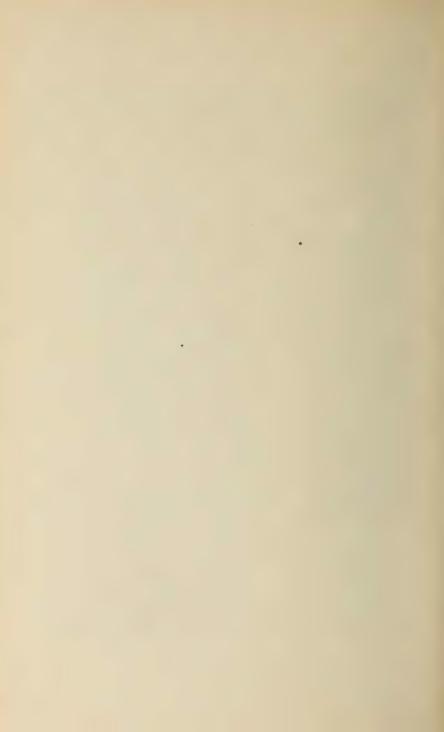
The number of dancers and attendants varied from time to time, and sometimes women took part in the procession. At some time during the performance there was placed in front of each mask one of the bound hogs and great numbers of bundles of taro, yams, and other food. After a short ceremony, this was removed and taken away to be cooked and eaten, though not everything that was eaten was offered in this way.

The smaller masks did not always appear in the procession, nor did they seem to have any special honor, as during the performance the women would often talk to them, and even slapped them in the face. Between the main performances one or both of the small masks would come out with sticks and run around the village. All the young men and boys took to their heels, and if one got anywhere nearby, a stick was thrown at him.

During one performance on the afternoon of the second day, which I saw, a woman dancer indulged in a special fit of scolding, or at least appeared to do so, and was answered by two old men who



REAR OF THE PROCESSION WITH THE TWO SMALL MASKS, AWAR, NEW GUINEA.



were among the spectators. This continued for ten minutes or more. The woman would come out and talk excitedly for some time, stamping the ground with her foot and swinging her arms, and then the men, one or both, would answer, running around the dancers in an excited manner. I was told the woman was scolding the men for killing so many pigs and using up so much taro. She said they had already had enough, and should not kill any more pigs. Shortly after a man came with a bunch of bananas and made an excited speech while he ran around the procession and beat the bunch on the ground, scattering the bananas in all directions. This was apparently an offering to the masks.

The ceremonies closed on the evening of the fifth day. After a short performance about 3:30 to 4:30 p. m., the masks returned to the enclosure. Then all the women and children disappeared from the village. After ten or fifteen minutes the shell trumpets were heard giving a peculiar wailing sound, and the procession again came out and proceeded with trumpets to the end of the village. Here they stopped, and the trumpets proceeded on slowly down to the lagoon. Meanwhile, a number of men with spears took their places near the masks, and at a certain signal the spears were thrown into the masks which were then thrown down ("killing the masks," so they said). The men declined to give any further information. The trumpets gradually got weaker, to make the women and children think the tamburans ("spirits") were going back to their house in the lagoon, so my interpreter said. The masks were then immediately dismantled, and the feathers and ornaments put away The frame was destroyed, so that for future use. no sign of the masks remained anywhere to be seen. I left before this was quite completed, and, as I passed the enclosure, there was still one man blowing away on a shell trumpet. No woman or child was to be seen anywhere near the village.

ALBERT B. LEWIS.



THE THUNDER CEREMONY OF THE PAWNEE

BY

RALPH LINTON

Assistant Curator of North American Ethnology

No. 5





FIELD MUSEUM OF NATURAL HISTORY

CHICAGO







FOX, A SKIDI PAWNEE.

THE PLAINS INDIANS

(Hall 5)

PREFACE

The Field Museum's collection illustrating the life of the Indians of the Great Plains is one of the best and most extensive in this country. Much of the material has been obtained directly from the tribes through research of museum officials and others employed by the institution, among whom Mr. S. C. Simms, Dr. G. A. Dorsey, Mr. James Mooney, and Mr. H. R. Voth deserve especial mention. The collections have been further enriched by purchases and particularly by numerous gifts of Mr. Edward E. Ayer, a trustee of the institution, who has always taken a profound interest in this phase of the museum's activities.

The exhibits are especially rich in objects used by the Indians in connection with their religious observances, and several miniature groups have been prepared showing the manner in which the Pawnee, one of the Plains tribes, performed their most important ceremonies. A proper understanding of the significance of such ceremonial objects is impossible without some knowledge of the religious concepts and observances of the tribes represented. The present series of leaflets is designed to give this necessary background by presenting the facts in a simple and popular form. Much of the information contained in them has already been published in various scientific publications; but the descriptions of the Pawnee ceremonies have not previously been published, and it is hoped that they may prove of interest to the scientist, as well as the lay reader.



FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1922

LEAFLET

NUMBER 5

The Thunder Ceremony of the Pawnee

(Hall 5, Case 60)

The Pawnee were a tribe of the Caddoan linguistic stock who, in historic times, occupied the valley of the Platte river in Nebraska. The name Pawnee is probably derived from pariki ("a horn"), a term applied to them by the neighboring tribes because of their peculiar method of dressing the hair. They called themselves Chahiksichahiks ("Men of Men"). They seem to have come into Nebraska from some region to the southwest, expelling an earlier population; but this movement was an ancient one, and the first Siouxian tribes to enter the Platte valley found the Pawnee already established.

The region in which the Pawnee lived was high, dry, and rather sandy, with little timber except along the rivers. On the west, toward the mountains, it was rough and broken. In early times buffalo and other game were abundant. Although the Pawnee ranged over a large territory in pursuit of the buffalo, they were not nomads. They spent the greater part of every year in permanent villages and raised large crops of corn, beans, squashes, and pumpkins. Corn played a much more important part than the buffalo in their ceremonies and mythology, and it is evident that they were an agricultural rather than a hunting people.

The tools, weapons, and utensils of the Pawnee differed little from those of the other Plains tribes, but they understood the arts of pottery-making and basket-weaving. During the summer the men usually wore only a loin cloth and moccasins, adding leggings and a robe in winter. The women wore moccasins. leggings, and a skirt made from a buffalo hide tanned on both sides. Upper garments other than the robe do not seem to have been worn in ancient times. The men stiffened their hair with paint and fat, and made it into the form of a curved horn. Both sexes pierced the ears, and often wore large numbers of ear-rings. In their permanent villages the Pawnee lived in earth lodges (see Leaflet "Annual Dance of the Medicine Men"), but when on the hunt they occupied tipis of the sort used by all the Plains tribes.

The Pawnee were divided into four sub-tribes or bands, the Chaui, Pitahauerat, Kitkehahki, and Skidi. The first three of these were closely related, but the Skidi differed somewhat from their associates, and considered themselves more closely related to the Arikara, another Caddoan tribe, who lived some distance to the north. In their settlements along the river, the four bands preserved a regular order, the Skidi being farthest upstream, the Pitahauerat farthest downstream, and the other two bands between. Each band was divided into a number of villages which were social as well as geographical units. All the members of a village believed themselves to be descended from a single ancestor, and marriages were usually made within the group. Descent was reckoned in the female line. Each village possessed a shrine (bundle) containing sacred objects, and priests who had charge of the rituals and ceremonies connected with these objects. It was ruled over by a hereditary chief and a council composed of its leading men. If the chief was a man of character and ability, he exercised undisputed

authority, settled all difficulties, and preserved order. He was expected to give freely, and was usually surrounded by dependents. His orders were enforced by four men, called Nahikuts, who stood next to him in social position. Below these ranked the Kurahus or priests, who performed the ceremonies. Of still lower rank were the Kurau or medicine-men and the Narawiraris or warriors, while at the bottom of the scale came the remainder of the village.

The villages composing each band were held together by their religious ceremonies, in which each village had its place and share, and by the council, composed of the chiefs of all the villages. The tribe was similarly united, its council being made up of the councils of the bands. In the meetings of these councils rules of precedence and decorum were rigidly observed. No one could speak who was not entitled to a seat, although a few privileged men were permitted to be present as spectators.

The religion of the Pawnee seems, in certain respects, to have reached a higher development than that of any of the other Plains tribes. In their pantheon Tirawa reigned supreme. To him the lesser gods of heaven and earth, as well as the people themselves, acknowledged authority. Tirawa ruled from his position above the clouds, and both created and governed the universe by means of commands executed by the lesser gods, who were subject to him. He was conceived of as a purely spiritual being, and was not identified with any object or natural phenomenon. Next in rank to Tirawa and his wife, the Vault of Heaven, stood the Evening Star, Tcuperikata, She maintained a garden in the west in which there were fields of ripening corn and many buffalo, and from which sprang all streams of life. Even the Sun renewed his fire nightly at her lodge. Through her four assistants, Wind, Cloud, Lightning, and Thunder, she transmitted the mandates of Tirawa to the people upon earth. From her union with the god of next rank, the Morning Star, Opirikata, sprang the first being upon earth.

The Morning Star seems to have been a personification of the Male, as the Evening Star was of the female principle. He was conceived of as a warrior who drove the other stars before him from the sky. It was to him that the Skidi band offered a human sacrifice.

Next in rank to the Evening and Morning Stars were the gods of the four world-quarters, who stood in the northeast, southeast, southwest, and northwest, and supported the heavens. To them Tirawa gave the task of dividing up the earth into the divisions which we find at present. Next in rank to these were the three gods of the north,—the North Star, who presided over the council of the stars, and who gave the ceremony for the creation of chiefs to men; the North Wind, who sent men the buffalo, and Hikus, who gave the breath of life. Below these in turn were the Sun and Moon, from whose union had sprung the second being on earth who, mating with the offspring of the Morning and Evening Stars, produced the human race.

There were a number of minor heavenly gods,—the second Morning Star, who assisted the Morning Star, the Big-Black-Meteoric-Star, who was the special god of medicine-men, the Star of the South, who stood at the southern end of the Milky Way and received the spirits of the dead, Skiritiuhuts ("Fool-Wolf"), who felt slighted in the councils of the gods, and, who, in revenge, introduced death into the world, and several others.

The greater part of the heavenly gods were identified with stars. The sacred bundle of each village was believed to have been given to its ancestor by one of these heavenly beings; and when the villages of the





A SACRED BUNDLE OF THE PAWNEE.

band assembled for ceremonies, they arranged themselves according to the positions of their guardian stars in the heavens.

Only less powerful than the gods of the heavens were the gods of the earth. These were for the most part identified with animals in the same way that the heavenly gods were identified with stars. The earthly gods were organized into four lodges each of which had its leaders and its messengers, who served as intermediaries between the earthly gods and men. In these lodges they gathered in council to make or mar the fortunes of men, and to them favored mortals were taken to be instructed in the mysteries of earthcraft. The earthly gods were the special patrons of medicine-men and warriors.

The religious ceremonies of the Pawnee were numerous and varied. They may be divided into two main classes,—ceremonies, which were in charge of societies whose members had certain secrets in common, and ceremonies which were participated in by the whole village, band, or tribe. To the first class belong the ceremonies of the warrior societies and the medicine-men. To the second class belong those which had to do with the welfare of the people.

Practically all the ceremonies of the second class centered about collections of sacred objects, called by the whites sacred bundles. Each village possessed one of these bundles, and there were two additional bundles which were the property of the whole tribe. The objects in the bundles varied, but had a general similarity, each bundle containing at least one pipe, tobacco, paints, the skins of certain birds, and the Mother-Corn. The last consisted of two ears of corn, which were the most sacred objects in the bundle. When not in use, the objects were wrapped in a buffalo hide and hung from the wall of the lodge. In connec-

tion with the bundle there were certain taboos which were rigidly enforced.

The ceremonies connected with the sacred bundles seem to fall into three divisions,—those ceremonies which were the common property of all the bundles and taken together formed the tribal ceremonial year; those ceremonies which were the property of the village bundles, and were open primarily to members of the village, and those ceremonies relating to the two bundles which were the property of the tribe as a whole. The rituals of the bundle-ceremonies were the property of certain priests, but members of the village or tribe who assisted in the performance of the ceremony had a right to know at least part of the meaning of the ritual.

All the ceremonies connected with sacred bundles seem to have had as their underlying idea a repetition, either through ritual or dramatization, of acts performed by supernatural beings during the mythologic age. As a rule, the ritual predominated, the dramatization playing only a minor part. The ritual was a formal method of restating the acts of the supernatural beings, and served the double purpose of redirecting their attention toward the people and of reminding the people of the deeds done for them by the gods. In this way the relationship between men and the supernatural world was renewed; and the gods, pleased with the attention bestowed upon them, continued their protection over the people. Coupled with practically all the ceremonies there was some form of offering or sacrifice, this idea reaching its climax in the Skidi sacrifice of a maiden to the Morning Star.

The bundles and their accompanying ceremonies collectively regulated and made provision for all the necessities of life during the year. All the bundle-ceremonies were held during the spring, summer, or

autumn. In winter the gods were thought to have withdrawn from the earth. The first thunder in the spring was thought to be a notification that they had once more turned their attention to it, and the people at once held a ceremony of welcome,—the Thunder Ceremony. This ceremony ushered in the ceremonial year, and was followed in regular order by a number of others. First came the ceremony called Paruxti, by which the deity of that name was supposed to be called to earth, and at which sacred corn was shelled and given to the people for seed corn. Immediately after this followed the ceremony, called the Planting of the Corn. When the first shoots of the new crop had appeared, a ceremony called Going After the Plant was performed. In the autumn there was a Harvest Ceremony, followed by the ceremony known as the Making of New Mother Corn, at which the Mother-Corn in all the bundles was renewed. In addition to these seasonal ceremonies there were a number of others whose time was not fixed.

The so-called Thunder Ceremony ushered in the ceremonial year. Although neither the most important or the most elaborate of the Pawnee ceremonies, it was, more than any other, at the bottom of their ceremonial life. It paved the way for the ceremonies of agriculture and the rites for the calling of the buffalo. It promoted the well-being of the tribe, and was efficacious in driving back the malignant being of the southwest, the bringer of disease. It instructed the people as to their duties and privileges in their relationship to the deities, and finally it afforded many opportunities for direct communication with the deities themselves in a number of rites of sacrifice which formed an intrinsic part of the ceremony as a whole.

The first thunder in the spring was thought to be the voice of Paruxti, a deity who was the messenger of Tirawa and combined in himself the essence of the four servants of the Evening Star,—Wind, Cloud, Lightning, and Thunder. He passed over the land in a storm, and as he spoke, the earth awakened, and life was kindled anew. Returning to his lodge in the west, he kindled new fire and offered smoke to the great heavenly gods, thereby informing them that he had visited the earth, and that all was well. The gods then turned their attention earthward, and prepared to receive the prayers and offerings of men.

As soon as the thunder had been heard, the priests of the Four Direction bundles assembled and prepared for the ceremony, which was held even if the tribe were away from their permanent villages on the hunt. Going to the lodge where the Aripahut bundle was kept, they took it down, and, when they were seated, the chief priest opened it and spread out the sacred objects. He then took up the rattles which had been fastened to the bundle, and giving them to the four other priests, said, "Priests, Tirawa has spoken. We must now sing the songs that were given to us with this bundle. It is a long time since we sang them, and we will make some mistakes, but Tirawa will help us with the ceremony." Shaking their rattles as an accompaniment, they then sang,—

First Song.

"They sang this song above, they have spoken. They have put new life into the earth. Paruxti speaks through the clouds, And the power has entered Mother Earth. The earth has received the powers from above."

This verse was repeated 56 times, a single word being changed at each singing. At the end of the singing the priests made four grunting sounds, symbolizing the noise of the thunder in the four world-quarters, and laid down their rattles. After each of the songs of the ritual this was repeated, and after



MINIATURE GROUP IN FIELD MUSEUM, SHOWING THE THUNDER CEREMONY.



each song they smoked, and rested for a time before beginning the next.

After finishing the first song, they sang the following songs in order, repeating each ten times with the change of a single word each time,—

Second Song.

"It is you who speak, you who stand in the west.

Let them now take possession of the earth.

Let them now have the sacred bundle containing the wonderful things."

Third Song.

"The clouds looking like many tipis are coming from the west.

The clouds shall touch the earth and the earth shall receive power from Paruxti."

Fourth Song.

"The earth shook.

It was Paruxti's power that made the earth shake.

It is the earth that is shaken by the wonderful power of Paruxti."

Fifth Song.

"The power is now hidden in the earth.

The power is now hidden in the earth.

The earth now possesses the power.

Paruxti's power is the power in the earth."

At the completion of the songs there was a pause, and then the chief priest said, "It is now time for us to make a sacrifice of a heart and a tongue to Tirawa."

During the singing one of the priest's assistants had gone into the timber, and cut a number of slender willow wands. He gave these to one of the men participating in the ceremony, who stripped them of their bark, cut them into arrow lengths, and passed them to a second man who painted them red. The second man passed them to a third, who attached a little sack of tobacco to each and passed them to a fourth, who attached two strings of blue beads. The fourth man passed them to a fifth, who tied on pieces cut from scalps, kept in the bundle for that purpose. When the wands had been prepared, the man who had

painted them went to a buffalo skull, placed north of the fireplace, and painted it with designs symbolizing the garden of the Evening Star. While this was going on, one of the priests took a dried buffalo heart and tongue, and cut each in nine pieces, arranging the pieces in nine little piles, in a row.

When these preparations were finished, the chief priest said,—"Chiefs sitting around in a circle, this offering is to be made to Tirawa, our father in the heavens, who made all things for himself. He it was who gave us the sacred things here before us. He is listening to us. We are sitting, as he told us to sit. We are doing, as he told us to do. Now we shall make the first offering to Tirawa." The priest of the Yellow Calf bundle then went to the chief priest, and was dressed by him in the buffalo robe which had been around the bundle. The sacred pipe from the bundle had previously been decorated and filled, and this was now given to the priest of the Yellow Calf bundle, together with one of the piles of dry meat and one of the decorated wands. With these he passed out of the lodge followed by an assistant (errand man), who bore a live coal from the fireplace in a bunch of grass. The earth taken from the fireplace of the lodge had been piled up in a small mound outside the entrance, which faced the east. Beyond this mound the two kindled a small fire, the fuel for which had been laid ready. On this fire they placed the dried meat, and thrust the wand into the ground between it and the mound. As they did this, they, and the priests within the lodge, sang,-

"Smoke for the Above is wavering.
The wonderful smoke is wavering.
Smoke for the Above is being eaten.
The wonderful smoke is being eaten."

The meaning of this song is that when the offering is first placed on the fire, the smoke hesitates and wavers, but soon it begins to ascend straight upward, a sign that it is being drawn into the mouth of Paruxti and eaten.

The errand man then made a circuit of the fire, and standing on the northeast blew puffs of smoke from the sacred pipe to the four world-quarters. Then he lifted the pipe slowly toward the sky, and lowering it, poured the tobacco from it upon the fire. This completed the first sacrifice, and both re-entered the lodge, and resumed their seats in the circle.

The chief priest then said, "Priests, this offering is now to be made to the god who presided over the other gods, when the council was held, deciding what the people should have, and what they should not have. This offering of meat and a wonderful stick are to be made to the god in the east, who will bless us, and who rules us aright, so that our people will be under the special care of this god." This god was the Morning Star. The same priest, who had made the first sacrifice, then took the offering out of the lodge, and placed the meat upon the fire where the offering to Tirawa had been made, thrusting the wand into the ground to the east of it.

When this priest and his errand man had returned, the materials for the third offering were prepared, and the chief priest said, "This offering is to be made to the Evening Star, the mother who has made all things. She has a garden in the west, where corn is green, and where the ear of corn is the leader of all men, where there is a bundle of dried meat, and where all good things of life exist. The errand man and this priest will make the offering, and the gods will look down upon the errand men. These gods will help the errand men. They will make our fields green. They will loosen some bundles of meat and cover the land with buffalo." The priest and his er-

rand man then left the lodge, and kindling a fire to the west of the lodge, made the sacrifice.

The fourth sacrifice was then prepared, and the chief priest said, "Now, priests, young men, and you chiefs who watch over your people, this offering is to be made to the Big-Black-Meteoric-Star, who stands behind the other stars, and who is gladdened by the offerings which we now make to him. He will send the lesser gods to drive away disease which may approach our camp." This offering was placed to the east of the lodge, with those to Tirawa and the Morning Star.

For the fifth sacrifice the priest said, "Chiefs, young men and priests, you who preside over the people, we are to make this offering to the northeast god (North Star), who watches over the people in the north. He is especially gladdened by this offering, and he will look down upon us. Especially will he look down upon us leaders, come to us, and give us knowledge to rule over the people, and we will be happy. Take the offering. Carry it to the north, and place it in the north."

For the sixth sacrifice the priest said, "Now, chiefs, priests, and young men, you who are to receive this bundle upon your breasts, take this bundle into your arms. Through you this bundle was made leader. When the errand men called upon certain gods, and especially the North Wind, to send buffalo, he received our gifts and prayers, and came to us, bringing the buffalo with him. Through his kindness we killed many buffalo, and from them we are making offerings to the gods in the heavens, so in our offerings we must not forget the North Wind."

The speech for the seventh sacrifice was as follows: "Now priests, young men, and chiefs, this offering is to be made to Ready-to-Give. The son of Ready-to-Give stands there. He it was who, when on earth,



A PAWNEE PRIEST IN CEREMONIAL COSTUME.



taught us to keep our villages clean so that disease would not enter them. It was he who came to warn our people of the approach of the enemy. He assists his father in sending buffalo. [Ready-to-Give was one of the titles of the North Wind.] He assists the warriors to capture ponies. When we are near the village of the enemy, ponies come out on account of his power. He is called Pahokatawa."

The speech for the eighth sacrifice was, "Priests, we are about to make an offering to him who was made by Tirawa, and who stands and gives us light. We are to make this offering to the Sun, Sakura, to make him glad. In return for this gladness he will take care of our people so that we shall be happy." This sacrifice was placed on the south side of the lodge.

The speech for the ninth sacrifice was, "Priests, chiefs, young men, this offering is to be made to the one that stands in the night. When she sees this offering, she will be made glad. In return she will look down upon us, and the people will increase. She will look down upon the land, and everything will be green. Through her all things shall multiply. The fruits along the streams and everything put into the ground will grow, so that our people will have plenty to eat. This offering is to be made to the Moon." This offering was also placed on the south of the lodge, just east of that for the Sun. At its completion the priest and errand man re-entered the lodge, and were given the tenth sacrifice, which consisted of an unpainted wand to which were tied a bag of tobacco, beads, and a scalp, The chief priest said, "This last offering will now be made to the Buffalo Father who stays in the tipi with his wonderful spear, who dwells in the skull sitting there. The spirit of the buffalo skull shall whisper to the buffalo in the west so that they will start eastward toward our village, and we shall have plenty of buffalo. The women and children shall have plenty to eat, and we shall all be happy." The priest who had made the last sacrifice then placed the wand by the buffalo skull. This completed the sacrifice portion of the ceremony.

When the sacrifices had all been made, the chief priest took up a pipe filled with tobacco and, holding it in his left hand, said, "Priests, chiefs, young men and old men, we have been singing of what the gods did when they first created all things. We are now about to sing about the only being who visits the earth and brings his power to us from the gods in heaven. This power is Paruxti's. It is a long time since we sang the songs about Paruxti, but we shall do the best we can." He told the priests to take up their rattles. and then all sang the last ritual of the ceremony. This ritual was in three parts. The first part symbolized Paruxti's visit to earth: the second, his hunting of the buffalo; and the third, his return from the hunt. The first part was repeated seventy times; the second, thirty-four times; and the third, seventy-four times. At each repetition there was a change in a single word or phrase, the change being of a sort to indicate progression. The first part runs thus:-

> "Getting ready to come, yonder he sits down, The Wonderful Being, my dear father, Yonder." (Grunting in imitation of thunder.)

At the first repetition, the phrase "yonder he sits down," in the first line, was changed to "He is now sitting down;" at the second repetition, to "He is now seated;" at the third, to "He moves," and so forth. As the song went on, he was said to rise, to look around, to walk, to leave his lodge, to think of coming to the earth, to begin his journey, to travel over hills and bottom lands, to cross rivers, to reach the village, to walk through it, to cross the country, and finally to seat himself in his lodge once more.

The second part of the ritual was identical with the first part, except that a new series of changes were substituted for the phrase, "Yonder he sits down." The third part was like the first and second parts, except that the first line of the first verse was changed to, "Now he is returning." In the succeeding verses, this was changed to indicate his passage over the country, his return to his lodge, his lighting of his pipe, and his offering of smoke to the heavenly gods.

When the whole of this long ritual had been sung, the priests laid their rattles down gently, and all were silent for a time. Then the chief priest said, "We have sung about Paruxti with his power, who has touched the earth, the timber, and the streams of water. has gone through our fields, and has walked through our villages, and has returned to his lodge in the heavens above. We will now offer the smoke, offering to the different gods in the ceremonies." A man then rose, and taking the sacred pipe used in the sacrifices, made an offering of smoke to the gods. The errand man then made a small fire of sweet grass in the lodge. to the southwest, kindling it with coals from the fireplace. Another man then took the objects from the sacred bundle one by one, and passed them through the fragrant smoke, returning them to their proper places. After this the participants in the ceremony came one at a time and bathed their bodies in the smoke, the chief priest coming last. When he had incensed himself, the chief priest left the lodge and stood in front of it, facing the east. The errand man thereupon extinguished the fire, and obliterated all traces of where it had been.

During the latter part of the ritual, women had brought in kettles of corn and other food for the participants. As soon as the chief priest knew that the fire of sweet grass had been extinguished, he sang a ritual to inform the gods that these good people were providing for those who had made offerings to them, and were therefore entitled to their help. He sang,—

"I come! Now we raise our voices for Mother-Corn.

Mother-Born-Again.

Mother-Corn-who-carries-them-through-obstacles.

It is our father who sits in the pathway to receive prayers.

Yonder their fathers dwell in the heavens.

Yonder the Wonderful Being dwells in the heavens.

Yonder their father dwells in the heavens, where the thunders are to be heard.

Yonder their fathers dwell in the heavens.

Yonder in the heavens stands Ready-to-Give.

Mother-Corn's kettles are filled with corn brought by a child.

Listen! Boy whose name is Little Son.

Listen! Boy whose name is Little Son.

It is through him that I walk around the circle of the village and call upon the gods to look down upon this boy.

I come!"

As he sang, he made the circuit of the village, repeating the song over and over, and finally returned to the lodge where the ceremony had been held. He entered and sat down, and then said, "Let us, priests, chiefs, young and old men, know that this ceremony is now ended. It is now the time to tell stories and to eat." The corn, which had been brought in cooked, was dished out in a prescribed way, and the meat was cooked over the fire by one of the errand men. When it was done, it was divided among the priests, who ate a little, but saved the greater part to take away with them. Small portions of the corn, and of the meat and fat, were offered to the gods.

When all had eaten, the chief priest said, "Priests, we have now gone through the ceremony that was given to us by Paruxti. A young boy wished to see this ceremony. It is for that reason that you, priests, entered this lodge, and sit upright in a circle in the lodge, sitting in the places of the gods; that you sit upright, as they do, sitting close together. You sit in their places, and we offer stories and rituals that they

recited in the ancient times of the former priests, who long ago sat in the places where you now sit. Now, priests, the time is approaching, as we sit in this lodge. for us to move: but before we move. I rise to say that by all the offerings we have made while sitting in this lodge the gods have been made glad, the gods who stand in the heavens. The offerings were made to them, and they received those offerings. Well then, we shall see which one of these gods will send good gifts to the people, and because of this ceremony will take pity on us. It is time for us to hasten and rise. Priests, we must now hasten to rise.....Now, priests, we are going to rise. We are going to walk toward the entrance belonging to Mother-Corn. Mother-of-the-Dawn, Mother-Sunset-Yellow. Now. priests, we rise! We walk toward the entrance, belonging to Mother-Corn. Rise! Priests!"

At the last word all rose simultaneously and passed out of the lodge, and the ceremony was completed.

The description of this ceremony has been compiled from the unpublished notes of Dr. G. A. Dorsey, formerly curator of the Department of Anthropology in this Museum.

RALPH LINTON



The Sacrifice to the Morning Star by the Skidi Pawnee

BY

RALPH LINTON

Assistant Curator of North American Ethnology



FIELD MUSEUM OF NATURAL HISTORY

CHICAGO







MINIATURE GROUP SHOWING THE MORNING STAR SACRIFICE.

FIELD MUSEUM OF NATURAL HISTORY DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1922

LEAFLET . NUMBER 6

The Sacrifice to the Morning Star by the Skidi Pawnee

The religion of the Pawnee was, in some ways, more highly developed than that of any of the other Plains tribes. At the head of their pantheon stood Tirawa, the creator of the universe, who seems to have been conceived of as a purely spiritual being. Below him there were a great number of gods of varying importance who were divided into two great classes, those of the earth and those of the heavens. The former were inferior in rank to the heavenly gods, and were the special guardians of individuals and secret societies. They were, for the most part, identified with The latter were the guardians and helpers animals. of the people as a whole and were, with a few exceptions, identified with stars. The most important of the heavenly gods were the Morning and Evening Stars. who represented respectively the male and female principle. The first being on earth was believed to have sprung from their union. A fuller account of Pawnee mythology will be found in Leaflet 5 "The Thunder Ceremony of the Pawnee."

The ceremonial side of Pawnee religion showed an equally high development. The worship of the heavenly gods centered around collections of sacred objects called by the whites sacred bundles. Each village possessed one of these bundles, and there were others which were the property of the tribe as a whole. It was believed that each bundle had been given to the people in ancient times by one of the heavenly beings,

and therefore constituted a link between the people and its divine giver. In the ceremonies connected with these bundles two ideas were basic,—one the idea of a sacrifice or offering, and the other that of a repetition, either through dramatization or ritual, of the acts performed by the divine giver. The human sacrifice to the Morning Star combined both ideas to an unusual degree.

The Morning Star sacrifice was performed only by the Skidi band of the Pawnee. There seems good evidence that it was carried out somewhat unwillingly. and that the officiating priests always found it a sore trial. Its performance was considered a religious duty, and this ceremony must not be confused with the torturing of captives as practised by several of the eastern tribes. The opposition to the sacrifice within the tribe itself increased until in about 1818 a young man, named Petahlavshahrho, rescued the victim in dramatic fashion, untying her from the scaffold at the moment of sacrifice and riding away with her. When safe, he gave her a horse, and sent her back to her own people. He then returned and declared that human sacrifices must cease. As he was a distinguished warrior and the son of the chief's sister, which according to the Pawnee system gave him the hereditary right to succeed his uncle, many strong men in the tribe supported his action. After this time, the ritual of the sacrifice was still regularly performed as a formal matter, but no actual sacrifices are known to have taken place.

The actual time of the performance of the sacrifice is not fully known, but it seems to have been made in the late spring or summer of years when Mars was morning star. It was usually made as the result of a dream or vision in which the Morning Star appeared to some warrior and demanded it, but it might also be

made as a result of some sign in the star itself, as when it appeared especially bright, or in years when there was a comet in the sky. It might also be performed without any direct intervention of the Morning Star, if some warrior had captured a suitable victim.

In this ceremony there was, coupled with the idea of sacrifice, an attempt to repeat the acts performed by the Morning Star in ancient times. These acts are recorded in a number of myths, not always consistent, of which the following is a good example:—

LEGEND

A long time ago Tirawa made the stars and gave them great power. He gave most of his power to the Morning star, who had a younger brother, the Sun. The Morning Star helped the Sun to have light. When Tirawa placed the stars in the heavens, they were just like human beings. In the east he placed those stars which were like men and gave the Morning Star and the Sun rule over them. In the west he placed those which were like women, with the Evening Star and the Moon as their rulers. Each had their village in the heavens, and the eastern stars knew that the western stars were women. After awhile some of the eastern stars sought the western stars in marriage. When the women stars saw a man star coming, they would tell the Moon, and she would go out to meet him. She would ask him why he came, and he would say, "I come to marry one of the women." She would answer, "That is what we want, come with me." They would walk together till they came in sight of the village. Then the Moon would stop and make a motion, and the ground would open so that the man star fell through and was killed. At last the Morning Star decided to go. He took with him his younger brother, the Sun, who carried upon his back a sacred bundle with a war club. As they traveled, the Morning Star went before

the Sun just as he still does. After a while they came within sight of the Evening Star village. They sat down and placed the sacred bundle in front of them. From where they sat, they could see the women stars playing all sorts of games outside their village. After a while the Moon came to them as she had come to the others. She asked, "Why do you come here?" The Morning Star said, "It is now time that we mingle and become one people. It is not right for part of us to be on the west and part on the east side." She said. "Good. I am glad you came and brought that bundle which you have in front of you. My thoughts are about that bundle." She invited them to come to the village, and they rose and followed. When they had gone a little way, she stopped them, and the Morning Star saw that the ground under them was cracking. The Moon called to them, "Come on! Are you afraid?" The Morning Star answered, "No. I am determined to have you." He took the war club from his younger brother and sang:-

"I become myself when I become angry.
With the war club I strike the earth.
I strike the ground and undo the power of the Moon."

Then he struck the ground, and the cracks closed up, and it became firm. The Moon cried, "These are powerful men. They have destroyed my mother." By her mother she meant the power which was her own. Her powers had been given her by the Evening Star.

After the first obstacle, they went on until they came to a bed of flints too sharp to be walked over, then to a thick wood of locust trees, then to a place where it was very hot, then to a bed of cactus, then to a long stretch of sword grass. At each of these obstacles the Morning Star sang his song and struck the ground with his war club so that the obstacle disappeared. When they had passed these dangers, they

came to magic animals which attacked them, first snakes, then water animals, then buffalo, and last bears. Each of these in turn the Morning Star killed with his club. Then the Moon had no more powers left, and the Morning Star and the Sun entered the village of the women stars. The Morning Star married the Evening Star, and the Sun married the Moon. They took them back to their own village. After a time a child was born to each couple, and these children were placed on earth. They married, and from them sprang the human race.

The Moon put all these obstacles in the way of the Morning Star, because she did not want the people on earth, in after times, to live forever. All these obstacles were sicknesses and troubles which would be brought down upon the people. But the Morning Star and the Sun can give power to men to destroy these ills just as they themselves destroyed the obstacles.

It has already been said that the sacrifice was most commonly made as a result of a dream or vision in which the Morning Star demanded it. Immediately on waking in the morning, the man who had had the dream went outside his lodge and began crying and mourning, his cries gradually becoming a song. He sang:—

"When he comes.
When he comes.
Father, I am seeking for you."

By this song he let the people know that he had seen the Morning Star in a vision.

It is said that the man who had had the vision sometimes did not obey the Morning Star, but more often he could neither sleep nor rest until he had captured a maiden for sacrifices. As soon as possible after the vision he went to the keeper of the Morning Star bundle and received from him the warrior's cos-

tume and sacred objects kept in the bundle for such expeditions. Many warriors usually volunteered to go with him, for it was thought that the object of the expedition insured its success.

When the party had assembled, they set out for the country of the enemy, sending scouts constantly in advance. If they killed any game on the way, they offered part of it to the Morning Star to remind him that they were on his business. The leader carried the sacred objects from the Morning Star bundle on his back.

When the scouts returned with word that they had found an enemy village, the party retired to some sheltered place and prepared for a ceremony. A circle was cleared, and a fireplace excavated as for a lodge. The leader then opened his pack and put on the sacred warrior's costume, and laid out the other objects to the west of the fireplace. A fire was kindled, and smoke offered to the heavenly gods. All then sang a song symbolizing the overcoming of the Evening Star by the Morning Star and how, from their union, a girl was born. In the course of this song the leader rose and circled the fireplace, acting in pantomime the journey of the Morning Star. At its conclusion he passed out of the circle, and standing facing the east addressed the Morning Star as follows: "I am praying to you as you directed, and we are seeking a sacrifice as you wished. I ask you to show yourself." In answer to this prayer the star was thought to shine with brighter light. The leader then addressed his party thus:-

"Warriors, young men, we are now sitting in a place dedicated to the Morning Star. We are about to sing the song that the Morning Star himself sang when he was in search of a woman, who put obstacles in his way. I want you all to dance with all your might and to be brave. Whoever shall be so lucky as to catch

the girl must call her Opirikuts as he touches her. Others must move away and not touch her. The life of anyone who touches her afterward will be in danger. Everyone must now dance toward the center. Let the fire be like the enemy."

All then sang a song symbolizing the obstacles overcome by the Morning Star, the refrain being, "This is the way I did when I became angry." A red-painted stick like those used in the Thunder Ceremony had meanwhile been prepared, and this was now offered to the Morning Star by the leader with the words, "See, I offer you only this stick with tobacco. It is all I have. Help me to obtain a real sacrifice."

By the end of this ceremony it was almost time for the Morning Star to rise, and the leader went outside the circle to the east and addressed a long invocation to him. He then returned, and all put on their war paint and ornaments. A fourth song was then sung in which four of the great heavenly spirits were called upon to give the warriors their powers. As they sang, the warriors danced around the fire, leaping upward and giving their war cries, while the leader ran about encouraging them to dance harder. At the end of the dance the leader made a last prayer to the Morning Star, and all set out for the village.

The war party surrounded the village quietly. The leader, who at this time was considered a personification of the Morning Star, took his post to the east, with his back to the village, while a second man took his place at the southeast, and was directed to howl like a wolf, as soon as the Morning Star rose. As soon as his call was heard, the leader turned toward the village, and the attack began from all sides. The first man to capture a young woman touched her and called out, "I pronounce you Opirikuts." As soon as this was done, the attackers drew off and started toward home.

The word Opirikuts was both a dedication and a curse. As applied to the destined sacrifice, it was the former, and protected her from any mistreatment. From the moment it was pronounced she was sacred to the Morning Star, and any one touching her would die as from an infection. She was turned over by her captor to the leader and the man who had howled like a wolf, who represented respectively the Morning Star and another star called Fools-the-Wolves. These men were responsible for her until the arrival of the party at the home village.

When the party had arrived at the Pawnee camp. the girl was given into the care of the chief of the Morning Star village. Several months sometimes intervened between the time of her capture and that of the sacrifice, and during this time she was well fed and made as happy and comfortable as possible. It was forbidden, however, to give her any new clothing, as the giver would thereby become Opirikuts also and die. She was fed with a bowl and spoon kept in the Morning Star bundle for the purpose, and no one else might use these. If a man deliberately broke one of these taboos and died, he was thought to have taken the girl's place as a sacrifice, and she was released and sent back to her own people. If she escaped, it was thought a sign that the Morning Star had rejected her, and she was not pursued.

When the proper season for the sacrifice had arrived, the chief of the Morning Star village had all the furniture removed from the interior of his lodge and sent two errand men to summon the participants in the ceremony. The priest of the village came, bringing his sacred bundle, and spread out its contents on the west of the lodge to form an altar. With him came his assistant, usually a relative, who would succeed to the office on his death. These men seated themselves be-

hind the altar. The girl, who was constantly attended by a guardian, was brought in and seated on the south side of the lodge. The chief of the village took his place on the southwest, with the leader of the war party on his left, while the man who had actually captured the girl sat on the northeast.

The priest built two little fires of sweet grass, one to the east, and the other to the west of the fireplace. The girl was taken to the eastern fire, undressed, and her body bathed in the smoke. Her guardian then painted her whole body red and dressed her in a black skirt and robe which were kept in the sacred bundle between sacrifices. The man who had captured the girl then went to the altar, and was dressed by the priest in another costume, also kept in the bundle. He was given black leggings and moccasins, his face and hair were painted red, and a fan-shaped head-dress of twelve eagle feathers was attached to his hair in such a way that it stood out straight over the back of his head at right angles to his body. This was the costume in which the Morning Star usually appeared in visions, and with its assumption the captor seems to have become a personification of that deity.

After these ceremonies had been performed, the captor left the lodge and passed through the village, entering every lodge and warning those who were to take part in the ceremony to come to the chief's lodge. Each family gave him a little red and black paint and certain other objects which were needed in the ceremony. When he had completed the circuit, he returned to the chief's lodge, and errand men were sent out to invite the chiefs and priests of all the villages to come to the ceremony. The Pawnee village was a social as well as a geographical unit. Several villages might live together. Each of the priests and chiefs had his prescribed place in the circle, while the space

behind them was packed with spectators. So great was the eagerness of the people to see the ceremony that many of them tore holes in the roof and walls of the lodge, leaving it a complete wreck.

When all the invited guests had taken their places, the chief priest told the priests of the Four Direction bundles to go into the woods and bring back four thick poles about twelve feet long. The priest of the northeast was to bring an elm; he of the northwest, a box elder; he of the southwest, a cottonwood; and he of the southeast, a willow. When they had returned, the four poles were laid on the fireplace with their ends together so that they formed a cross whose arms pointed to the four directions. The poles had to be long enough to last for the entire four days of the ceremony, and as they burned, they were pushed in toward the center, the cross being always maintained.

The ceremonies which followed are not fully known, but they consisted of many songs and dances, with feasting, and continued for three days and nights. During this time, and for the three days after the slaying of the sacrifice, the ordinary rules of conduct were set aside, and the priests announced to the people that if any man approached any woman during this period, she was to go with him willingly, that the tribe might increase.

Toward morning of each night, the representative of the northeast village danced around the fireplace, and taking the pole brought by the priest of that direction, pointed its glowing end toward the girl's body. This was repeated by the representative of the other directions in turn, but the girl's body was never touched with the brand. Indeed, the girl was treated with the greatest respect and consideration throughout the ceremony. She was told that the entire performance was given in her honor, and everything was done to lull

her suspicions and keep her in a pleasant frame of mind.

On the afternoon of the fourth day, the chief priest selected four men from the Four Band village to secure the materials for the scaffold. Under the direction of the leader of the war party which had captured the girl, they went to the nearest thick timber and searched until they found a hackberry tree near the center of the grove. At this tree they made an offering of smoke to the gods, and then went northeast from it to find an elm, northwest to find a box elder, southwest to find a cotton wood, and southeast to find a willow. These were to serve for the lower cross-bars of the scaffold. They then went east until they found an elm and a cottonwood large enough to be used as uprights. Finally, they went west and cut a willow to serve as the top cross-bar.

When the men had departed to search for the timber, the priests sang a song describing their actions. At its conclusion the chief priest sent the two chiefs of the Morning Star village, accompanied by a warrior, to select the site of the scaffold. This had to be some place near the village which had, to the east of it, a depression or ravine large enough to conceal several men. When the chiefs had made their choice, the warrior accompanying them gave his war-cry. An errand man had been stationed outside the lodge to listen for this, and as soon as he heard and reported it, the priest of the Skull bundle ran to the place, bearing the sacred bow and two arrows. The two chiefs had stationed themselves at the points where the uprights of the scaffold were to stand, and the priest shot an arrow into the ground in front of each of them, thus marking the place where the hole was to be dug. Between these arrows four priests then dug away the soil to a depth of about a foot, making a rectangular pit approximately the size of the wrapper of a sacred bundle when fully unfolded. The floor of the excavation was then covered with white, downy feathers. This pit was called *kusaru*, and represented the garden which the Evening Star kept in the west, or, according to another account, the reproductive organs of the Evening Star. The white feathers with which it was lined symbolized the milk of women and animals and the juice of young corn. After the pit had been completed, the holes for the uprights of the scaffold were dug by two young girls.

While the digging was going on, the party sent after the timbers had returned. The two uprights of the scaffold were first erected, then each cross-bar was tied on by a warrior from the village of the direction which it represented. Before tying it, the warrior would recount some deed. One would say, "I made a sacrifice of meat and carried it to the priest on my back. After the ceremony was performed, the priest whispered to me, 'You, young man, have brought meat here by means of the pack string. You will have an opportunity before the summer is over to lasso a pony in the enemy's country. The gods now know you. Do not fear to go on the war path.' I went. We found a village, and others became afraid and ran. I went east by myself and found the enemy's horses. I went among them and found one with an eagle-wing fan tied to its tail. I captured it and rode home. Since then I have made many sacrifices." The top cross-bar was tied by two men each of whom had made a sacrifice, but these did not recount any adventures in war.

It is probable that the scaffold was also painted at this time, although the ceremonies connected with the painting are not remembered. The two uprights were painted red and black, the former symbolizing day, and the latter, night. The lowest cross-bar was black, and symbolized the northeast; and its animal guardian, the bear. The second was red, symbolizing the southeast and the wolf. The third was yellow, symbolizing the northwest and the mountain lion; and the fourth white, symbolizing the southwest and the wildcat. The top cross-bar represented the west, and was painted blue or black and white, symbolizing clouds and rain.

By the time the scaffold was completed, it was about sunset, and the people dispersed. All spectators were sent out of the lodge, and the door was closed. The chief priest then drew upon the floor of the lodge four circles, one for each of the world quarters. and outlined them with white downy feathers. Each of these circles represented a region penetrated by the Morning Star in his search for the Evening Star and also the magic animal which he had overcome there. The white feathers symbolized the foam about their mouths when they attacked him. When the circles had been made, the spectators were re-admitted, and the priests sang a song descriptive of the journey of the Morning Star, while the chief priest danced around the lodge with a war club, destroying the circles one by one. When the song was finished, he straightened up and said, "Chiefs, priests, warriors, old men. I have destroyed the regions once controlled by the mysterious woman who wanted darkness forever. These animals were under her control, when the Morning Star traveled in darkness looking for her. She placed an obstacle in the southeast, which was controlled by the wolf. The Morning Star destroyed this obstacle, but preserved the mysterious animal. He continued his journey, traveled to the southwest, and again met an obstacle which he destroyed, but preserved the animal, a wildcat. He continued his journey, and when he came to the northwest, he again met an obstacle. He destroved it, but preserved the animal, a mountain lion. He went on to the northeast, and again destroyed an obstacle, but preserved its guardian, the bear. In the center of the earth in darkness he found the woman, conquered her, touched her with his war club, and turned her into the earth. The Morning Star then called the mysterious animals to him and said, "You beings are now under my control. Stand in the places where I found you, and watch over the people who shall be placed upon the earth and guard them. All powers you have you shall keep. You shall exist as long as the earth lasts. You are now placed as upright posts so that you will always hold up the heavens. Priests, chiefs, warriors, old men, I have this night followed the journey of the Morning Star. We will not forget these beings which he placed in the four directions, for he promised that they should partake of all offerings which the people made to the heavens. Let us begin singing the songs given to us by Mother White Star in the west (the Evening Star)."

When the chief priest had finished his speech, all began to sing the prescribed songs, resting and smoking informally after each. Like most ceremonial songs, these were long, with many repetitions, and were often obscure in meaning. As each song was finished, a tally stick, taken from a bunch kept in the sacred bundle, was laid down. The idea underlying this part of the ritual seems to have been that the girl at first belonged to the people and to the world of human affairs, but that, as each song was sung, she became more removed from them until, when the last tally was laid down, she had been won from the people, like a prize in a game, and belonged to the gods.

The singing usually lasted until about two hours before dawn. A priest then climbed on the roof of the lodge and announced to the people that the girl was about to be prepared for the sacrifice, and that it was time for everyone to set out for the scaffold. The chief priest undressed the girl, went through the motions of washing her and combing her hair, and painted the right half of her body red and the left half black. Her skirt was then replaced, black moccasins were put on her feet, and a black robe fastened around her shoulders. Lastly a head-dress of twelve black-tipped eagle feathers, arranged like a fan, was fastened on her head.

When the girl had been dressed, all resumed their seats and sang another song at the conclusion of which she was told to rise; and two men, chosen to lead her to the scaffold, came forward and placed thongs around her wrists. All then passed out of the lodge, with the girl in the lead and the priests following behind chanting.

The rate at which the procession moved toward the scaffold depended largely upon the disposition of the girl. Everything was done to conceal the truth from her, and force was not used unless absolutely necessary. If she mounted the scaffold of her own free will, it was considered an especially auspicious omen. The procession was timed to reach the scaffold a few minutes before the Morning Star rose, so that the men who tied her to it could complete their work and leave her alone when the star appeared.

While the girl was being tied to the scaffold, the men chosen for the last rites had assembled in the ravine to the east of it, where they were concealed from her view. A small fire was kindled there, and they prepared their paraphernalia. At the moment the Morning Star appeared, two men came forward bearing firebrands. They were dressed as priests, and had owl skins hung from their necks, showing that they represented the messengers of the Morning Star.

They took their places on either side of the girl, and with their brands touched her lightly in the groin and armpit. They then returned to the ravine, and a third man ran out, carrying the bow from the Skull bundle and a sacred arrow made for the sacrifice. As he came, he gave his war cry, and the people called to him and encouraged him as though he was attacking an enemy. Coming close to the girl, he sent his arrow through her heart, and ran back to the ravine. This part was usually taken by the man who had captured her. A fourth man then came forward with the club from the Morning Star bundle and struck the girl on the head.

A fire had been kindled to the southeast of the scaffold, and as soon as the girl was dead, her guardian came forward with a flint knife, and her captor with the dried heart and tongue of a buffalo. The guardian mounted the scaffold and cut open the body, while the captor held the meat below and caught the blood. The guardian thrust his hand into the thoracic cavity and painted his face with the blood. Sometimes he is said to have removed her liver and given it to the members of the Bear Medicine Society, who cut it into small pieces and ate it to acquire magical powers. The blood-soaked meat was burned on the fire near the scaffold as an offering to all the gods.

When these rites had been performed, the men among the spectators gave their war cries and crowded forward to shoot arrows into the body. It was thought desirable that as many arrows should be shot as there were males in the tribe, and boys too young to draw a bow were helped by their fathers or mothers. When each man had shot his arrow, the spectators dispersed and returned to the villages where feasting and dancing continued for three days.

The priests, the guardian, and those intimately

connected with the ceremony remained at the scaffold. When the crowd had gone, the guardian removed the arrows from the body one by one and handed them to an assistant who divided them into four bundles and laid these bundles northeast, northwest, southeast, and southwest of the fireplace. The body was then taken down and carried a short distance to the east of the scaffold, where it was laid face down. The sacred arrow was drawn from its heart and laid upon it. All then returned to the village, and the place was avoided for some time.

It was believed that the soul of the girl left her body at the moment she was struck with the club and went straight to Tirawa, who sent it to the Morning Star. The Morning Star clothed it with flint from his fireplace in the dawn and placed it among the stars in the heavens. Her body was thought to be not like ordinary bodies. Even after her death it possessed life. Things would be born from it, and the earth would be fertilized by it.

The sacrifice as a whole must be considered as a dramatization of the overcoming of the Evening Star by the Morning Star and their subsequent connection, from which sprang all life on earth. The girl upon the scaffold seems to have been conceived of as a personification or embodiment of the Evening Star surrounded by her powers. When she was overcome, the life of the earth was renewed, insuring universal fertility and increase.

Human sacrifices were rare among the North American Indians. The practice is known to have existed among the Natchez, who lived in the present state of Mississippi, and possibly in Arizona and New Mexico. In Mexico, on the other hand, the idea was highly developed, and under the Aztec rule large numbers of victims were immolated every year. It may be

significant that several of the practices and concepts connected with the Pawnee sacrifice find Mexican parallels. Early Aztec manuscripts show victims fastened to scaffolds like that used by the Pawnee and shot to death with arrows. In both places the body of the victim was cut open, and the blood offered. The idea that the sacrifice was more acceptable if the victim mounted the scaffold willingly was common to both, together with the still more striking idea that the victim was a personification of a deity. Among the Aztecs this concept reached its highest development, the victim in at least one ceremony being treated as a god for a year before his sacrifice. Finally, in both places there seem to have been astronomical beliefs connected with the sacrifices.

This account has been compiled from the unpublished notes of Dr. G. A. Dorsey and from articles by several other authors.

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Purification of the Sacred Bundles, a Ceremony of the Pawnee

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PURIFICATION OF THE SACRED BUNDLES, PAWNEE.
MINIATURE GROUP IN CASE 50, HALL 5.

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Purification of the Sacred Bundles, a Ceremony of the Pawnee

The religious beliefs of the Pawnee, which seem, in some ways, to have been on a higher plane than those of the other Plains tribes, have been described in Leaflet 5 of this series, under the title "The Thunder Ceremony of the Pawnee." At the head of their pantheon stood Tirawa, a purely spiritual being, who was not identified with any animal, object, or natural phenomenon. Below him there were a great number of gods of lesser rank who were divided into two great classes,—the gods of the heavens and the gods of the earth. The former were, for the most part, identified with the stars, the Evening Star holding the highest place, with the Morning Star second. The former was an embodiment of all the female, the latter of all the male, attributes. The gods of the earth were, for the most part, identified with animals, and their rank was less rigidly fixed. Of the two groups the heavenly gods were the more important, and were considered the guardians of the people as a whole, while the earthly gods were more especially the guardians of individuals and secret societies.

The ceremonies held in honor of the heavenly gods centered around collections of sacred objects called by the whites sacred bundles or medicine bundles. The Skidi Pawnee called them *chuhraraperu*, meaning

"rains-wrapped-up." The tribe was divided into a number of villages all of whose members traced their descent in the female line from a single ancestor. Each of these villages possessed a sacred bundle, while there were two others which were considered the property of the tribe as a whole. The Four Direction village had four sacred bundles one of which was sacred to each of the cardinal points. These points were, to the Pawnee, southwest, southeast, northwest, and northeast. The sacred bundle of each village was believed to have been given to its first ancestor by one of the heavenly beings, and constituted a link between its members and the divine donor. From their traditions the "gift" seems to have consisted rather in explicit directions for its making than in an actual presentation of the objects. The bundles were inherited in the female line so that their owners were always women. Their keepers, and the priests who performed their ceremonies, were, on the other hand, men.

All the village bundles contained much the same objects. The most important of these were one or two ears of corn, which were called Mother-Corn and were believed to give life to the bundle. They were shelled in the spring and distributed for seed, being replaced at harvest time. When the Mother-Corn consisted of two ears, one of these was attached to a stick and symbolized the male element or Morning Star, while the other symbolized the female element or Evening Star. Next in importance to the Mother-Corn were the tobacco-filled skins of hawks and owls. The hawk symbolized a warrior: the owl, a chief, because it was always awake and watchful. The owl seems to have also symbolized the watchfulness of Tirawa, the supreme being. One or more scalps, taken from slain enemies, were found in every bundle. Pieces cut from them were used in various ceremonies, and they had to be renewed from time to time. Four skins, each of

which contained red, black, and white paint in little buckskin pouches; sweet grass, a pipe and native tobacco, and the penis bone of a racoon, were also placed in each bundle, all these objects being used in the ceremonies. The sweet grass was burned as incense, and the bone was attached to a stick and used as a fork to remove meat from the pot. Some bundles contained additional objects.

When the bundle was not in use, all these articles were done up in an inner and an outer wrapper of buffalo hide and tied with a rope of plaited buffalohair. To the outside of the bundle were attached the stems of one or more pipes whose bowls were in the bundle, a few arrows captured from the enemy, and some other objects. The arrows were used as fire pokers and pipe tampers during the ceremonies. In ceremonial smoking it was forbidden to press down the tobacco in the pipe with the finger lest the gods should think that the smoker offered himself to them with the tobacco. Associated with each bundle, and often fastened to it, there were four large gourd rattles of special form. These symbolized the four dieties who were the special guardians of the Evening Star, and also represented the breasts of the two divine women in the west,—the Evening Star and the Moon.

Except at the time of ceremonies, the sacred bundle was hung up on the west side of its keeper's lodge, above the buffalo skull which was always placed there. When so hung, it was likened by the Pawnee to a dead man in his grave. The spirit lived in it, but slept. Even when opened, the bundle continued asleep until the Mother-Corn had been placed in it. It then came to life, and during the ceremony the corn and the other objects represented, individually and collectively, supernatural beings. These beliefs of the Pawnee differ considerably from those held by most of the other tribes who used sacred bundles; and Dr. G. A. Dorsey

has concluded that the village bundles of the Pawnee are more nearly comparable to the elaborate altars of the Southwestern Indians than to the medicine bundles of the northern Plains tribes and Central Algonkins.

It seems probable that there was originally a special ceremony connected with each bundle. There were additional ceremonies, such as that held when the first thunder was heard in the spring, which might be performed with several bundles in turn, and there were a few rites in which all the bundles participated. The purification of the sacred bundles belonged to the last class.

The purification ceremony was held in the spring and again in the autumn, before the tribe left their permanent villages for the buffalo hunt. It has already been said that the Four Direction village had four sacred bundles. These took the lead in successive years. When the chiefs had decided upon the date for departure on the hunt, they notified the priest of the bundle which was leader in that year. He sent his errand man to summon the priests of the other three bundles. These came to his lodge, bringing their bundles with them. As they entered, they beat their bundles, then crossed to the west side of the lodge, and seated themselves with their bundles in front of them on the ground. The errand man was then sent to summon the keepers of all the other village bundles, directing them to bring their bundles and also mats, pillows, and food-bowls. When these arrived at the lodge, they took designated places around it, spreading their mats on the ground and hanging their bundles, unopened, on the wall behind them.

When all had arrived, one of the four priests went through the village announcing the beginning of the ceremony and calling on the people to bring gifts to Mother-Corn. These gifts consisted of a robe, moccasins, a hair cord, to be used as a girdle, and dried meat and fat. The articles of clothing had to be new and unused, and the meat that of buffalo which had been dedicated to the gods at the time they were killed. The gifts could only be presented by men who were in favor with the gods. If the priests accepted them from men who were evil in their lives or negligent in their religious duties, the gods would be offended and refuse to send the buffalo. Before taking a gift to the lodge, a man painted himself red, so that all the people might know his errand; and, when the gift had been accepted, two messengers went through the village, thanking him publicly.

The priests and bundle keepers remained in the lodge for three days and nights, sleeping in their designated places. No ceremonies seem to have been performed during this period, and they passed the time in talk and in feasting on the food which was brought to them. No women were allowed to enter the lodge during the whole time of the ceremony.

On the morning of the fourth day the priests of the Four Direction bundles rose very early and dug a rectangular pit to the west of the fire-place, between it and the permanent altar of the lodge. The buffalo skull, which at ordinary times stood on this altar, was removed and placed north of the fire-place. The earth from the excavation was taken outside the lodge and piled in a mound before the door. When the pit was finished, the priests carpeted it with white downy feathers. This pit seems to have corresponded to the pit dug below the scaffold at the time of the human sacrifice to the Morning Star and, like it, represented the Evening Star's garden in the west, the source of all earthly fertility and increase.

When the pit had been completed, the priests directed the keepers of the various bundles to open them and take out the Mother-Corn. A sacred stick, kept in the Big-Black-Meteoric-Star bundle, was set up

just east of the pit. The keeper of that bundle then brought the Mother-Corn from it and placed it in the pit, thrusting the stick to which the male ear was attached into the earth so that it stood upright and leaning the other ear against its base. The keepers of the other bundles then came forward in turn and did the same. A wooden bowl filled with water was then placed to the east of the pit, between it and the fire-place. A clam shell was laid in the bowl, and a turtle, supported by a framework of sticks, was placed upon it. To the northeast and northwest of the bowl were laid the heads and necks of loons, to the southeast the head and neck of a swan, and to the southwest a gar fish. The meaning of these objects is not perfectly understood. The bowl seems to have represented earth and water: the turtle, fire and also one of the important earthly gods. The loons and swan represented earthly gods, guardians of medicine men; and the gar fish, the great sea monster which first gave the medicine men's ceremony to human beings.

After these objects had been arranged, the chief priest selected four men to sit at the northeast, northwest, southeast and southwest corners of the bowl. The sacred stick from the Big-Black-Meteoric-Star bundle, and a star chart, kept in a bag attached to that bundle, were taken outside and placed on the mound in front of the doorway. The priest then took four smooth stones from the same bundle and gave one to each of the four men. These stones were extremely sacred, and were believed to have been given to the people at the beginning of the world. They were provided with withe handles so that they could be carried without touching them. When they had been distributed, the priest said, "It is now time for these men to go outside and look at the heavens and over the earth. They will take with them these four stones. which were given to our people when the earth was created." Turning to the men, he told them to rise and go out of the lodge. When they had risen, he went to the man who stood on the northeast and gave him the sacred pipe from the bundle which was the leader in that year and a strip of dried buffalo fat about one foot long and four inches wide. After this the men passed out of the lodge, while the priests sang a song describing their looking at the heavens and earth.

The four men seated themselves around the mound of earth taken from the pit in the same positions they had occupied around the bowl in the lodge. An errand man then kindled a small fire to the east of the mound. and the man who sat on the northeast placed the dried fat upon it. As soon as the grease began to run out, the other three men caught some of it in their hands and greased their hands and faces. They also greased the sacred stones and passed them through the smoke. When this had been done, the fat was removed from the fire, and all four smoked the sacred pipe, passing it from one to another. At the conclusion of the smoking, the pipe was laid on the mound, and all stood up slowly, looking at the sky in all directions. They then picked up the fat, the pipe, and the sacred stones, and re-entered the lodge.

While the men were outside, the priests had sung a series of songs, but ceased singing as they entered. The man from the northeast, who was the leader of the four, went to the bowl of water, picked up the bird's head which lay northeast of the bowl, dipped its bill in the water, and drank from it. He then pressed it first to his right and then to his left breast, and replaced it on the ground. He took up the turtle and did the same with it, except that he pressed it against his abdomen instead of his breast. When he had finished, he stood a short distance away on the west, and the other three men came from their respective directions and went through the same performance. After this

rite, they seated themselves in their original places, and the priest said, "Priests, the men whom we have sent out to look about have returned. They will tell us what they have seen." The man on the northeast rose and announced, "We went out before daylight. We found the buffalo; so many of them that they have almost drunk the river dry." The others rose in turn and gave the same answer.

The chief priest then called some famous warrior and gave him the sacred pipe which the men had used, and gave the strip of fat to a chief. These passed around the interior of the lodge, first on the north, and then on the south side, offering first the pipe and then the fat to each of the keepers in turn. All reached for the pipe at once, trying to get as many hands on it as possible. They did the same with the fat, clutching it as if starving and trying to tear off pieces. This symbolized their eagerness to kill buffalo, and the tighter a man grasped the pipe, and the more fat he succeeded in tearing off, the better would be his success on the hunt.

When the pipe and fat had completed their circuit, they were placed on the altar. The priest then called the chief of the whole band to the altar and invested him with the robe, rope, and moccasins which had been provided as gifts to Mother-Corn. The sacred pipe was placed in his hands, and the priest announced, "Priests and men, this man will take us to the river." All the keepers then went to the pit and took from it the Mother-Corn belonging to their respective bundles.

While this was going on, men had entered the lodge and seated themselves in front of the bundles belonging to their respective villages. The star chart was brought in from outside and given to a warrior belonging to the village of the Big-Black-Meteoric-Star bundle. Three other men were given quivers belonging to other sacred bundles. These four seated themselves,

one behind the other, near the entrance of the lodge, the man with the star chart being in the lead. The various objects in the bundles were then distributed to the men from their villages. The chief of the band, in his ceremonial costume, left the lodge, and began to muster the small boys of the tribe outside. All who were old enough to take part were expected to be present, and in performing this duty the chief was supposed to show his watchfulness over the people.

During the distribution of the sacred objects the priests had been shaking their rattles and singing. Three songs were sung, and when they reached a certain word in the fourth, the man who carried the star chart iumped up and ran toward the river, closely followed by the men with the quivers. All the others followed them, with much crowding and fighting at the doorway. The priests and the keepers of the bundles remained behind. The men raced to the river bank, and there lined up in four ranks. Anyone who overtook the runner with the star chart snatched it from him, the idea being to carry it to the stream in the least possible time. At the river bank it was returned to its original bearer. The man with the star chart, and those with the quivers, stood in the center of the front rank, with the men who carried the Mother-Corn on either side. Behind them stood the men with the owl and hawk skins from the bundles. and behind these in turn the bearers of the less important objects. The last rank was made up of small boys, who carried racoon bones and arrows. When all had taken their places, the ranks opened in the center, and the chief came through, carrying the sacred pipe. He waded down into the water and went through the motions of bathing the pipe four times, although he did not wet it. He then pretended to wash first his right and then his left hand, and finally dipped his right hand in the water and touched it to his mouth,

nose, and forehead, and then drew it down his face. These movements were repeated four times, with the right and left hands alternately. When he had done this, he came up out of the water, passed through the ranks, and took his place behind the rearmost, with his face toward the village. The men of the first rank then waded down into the stream and went through the same performance with the sacred objects they carried. They then passed through the other ranks and took their place behind the chief. The other two ranks did the same. When all had finished, the chief led them back to the village. As they entered it, the small boys dispersed, but the men continued on to the ceremonial lodge, where they returned the objects they carried to the keepers of the bundles and put on their . robes, which they had left behind during the race. They then returned to their own lodges.

All the women who were bundle owners had ground corn during the preceding night and made mush. This mush had been brought to the lodge and given to the chief priest early in the morning, before the commencement of the ceremonies just described. He now offered a little of it to the gods and distributed the rest to the priests and keepers. They ate, and then tied their sacred bundles, took up their mats, pillows, and bowls, and returned to their own lodges.

After they had left the ceremonial lodge, a crier went through the town, telling the people to clean their lodges and the streets of their villages and carry the filth away. When this had been done, the priests who had taken part in the ceremony had a sweat lodge built, and one of them stood outside it, shaking his gourd rattle and singing. All the people assembled and ran a race down to the river. When they reached it, the priests waded in, came out at once, and went to the sweat lodge, where they took a steam bath. The

rest of the village, men, women and children, remained at the river, swimming and playing in the water.

Ceremonies of general purification were important among the settled agricultural tribes of the southeastern and southwestern United States. Among these tribes they were usually associated with the making of new fire, a feature which seems to have been lacking in the Pawnee ceremony. The account of this ceremony has been compiled from the unpublished notes of Dr. G. A. Dorsey.

RALPH LINTON



Annual Ceremony of the Pawnee Medicine Men

BY

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FIELD MUSEUM OF NATURAL HISTORY

CHICAGO







DANCE OF THE MEDICINE MEN, PAWNEE.
MINIATURE GROUP IN CASE 49, HALL 5.

FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF ANTHROPOLOGY

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LEAFLET

NUMBER 8

Annual Ceremony of the Pawnee Medicine Men

A general description of the Pawnee, with an account of their religious beliefs and social organization, has been given in Leaflet No. 5 of this series. Although geographically a Plains tribe, they differed in several respects from the typical tribes of the region. While the latter were all nomadic hunters, the Pawnee were settled agriculturists, inhabiting permanent towns and subsisting largely on their crops. When on hunting trips, they used the typical skin-covered tent of the plains, but in their towns they built large houses of wood covered with earth. A model of one of these houses is shown in the miniature group illustrating the annual ceremony of the Medicine Men.

The earth lodges of the Pawnee were dome-shaped, about forty feet in diameter and fifteen feet high. The roof was supported by two concentric rows of uprights, the outer row being planted just in front of a ledge, about a foot and a half high, which entirely surrounded the inside of the lodge. The outer posts, which varied in number according to the size of the lodge, were about seven feet high, and were placed about the same distance apart. The inner row of posts stood about half way between the outer wall of the lodge and its center, and were about twelve feet high. They varied in number from four to ten. All the uprights were forked and bore a row of cross beams, which supported rafters extending from the outer uprights to a point

just over the center of the lodge, where an opening about two feet in diameter was left as a smoke-hole. Long willow rods, closely spaced, were laid transversely over the rafters, and these in turn were covered with a thick layer of bunch grass. The sides of the lodge were built of timbers whose lower ends were planted in a trench, while their upper ends leaned against the cross beams of the outer uprights. The whole lodge was then covered with earth and sod.

The entrance was protected by a covered way, built like the lodge, which extended out from it. In all but one of the Skidi villages this entrance faced the east. In the center of the floor there was a circular fire-pit surrounded by a slight embankment. At the west side of the lodge, opposite the entrance, a space was always reserved. This space was called wiharu, the garden of the Evening Star, and was considered sacred. In it a buffalo skull was placed, facing the entrance, and above it the sacred bundles and other religious paraphernalia of the family were hung. Around the north and south sides of the lodges, sleeping platforms were built. These platforms were made of poles whose inner ends rested on the earth ledge, while their outer ends were supported by forked posts and beams. Over the poles were laid willow mats, coarse rush mats, and lastly tanned buffalo-skins. Each bed was screened off from those adjoining by willow mats. A lodge of ordinary size would have from eight to ten beds on a side. Those next the altar, which were considered most honorable, were occupied by the older children. Next were the beds of the aunts and uncles. then those of the parents, and lastly those of the old people. As many as ten families, all related by blood, sometimes occupied a single house. The sleeping platforms and other furniture were removed when the lodge was to be used for ceremonies, and are not shown in the miniature group.

The religious ceremonies of the Pawnee were of two sorts, ceremonies which centered around the sacred bundles and were participated in by the whole village, band, or tribe, and ceremonies which were performed by societies whose members had some secret in common. In the ceremonies of the first class, the most important of which have been described in Leaflets 5-7, an appeal was made primarily to the great heavenly deities. In the ceremonies of the second class, the appeal was made to the less powerful, but more intimate earthly gods who were believed to have bestowed power upon the performers. Among the ceremonies of the second class, those of the medicine men were the most important.

In every Indian tribe there were a number of persons, called medicine men by the whites, who were regarded as the possessors of supernatural powers which enabled them to recognize and cure disease. They were believed to have received their powers from some supernatural being either as a direct gift or as the result of instruction by some person who had received such powers. Although they frequently employed sleight of hand and other trickery to impress the uninitiated, many of them believed that they really possessed the powers attributed to them, and performed their ceremonies in good faith. In some cases they combined the functions of a shaman or priest with that of a healer, and thus exercised great influence over the people. In most of the populous tribes they were organized into guilds or societies.

Among the Pawnee, the medicine men ranked socially next to the chiefs and priests. They usually wore a distinctive costume consisting of a buffalo robe with the hair out, a bear's-claw necklace, and a cap of beaver skin. They also wore charms or amulets consisting of the tail and claws of the wild cat, badger, or bear, bear's ears, miniature pipes, and downy feathers,

attached to a bandoleer of beads or seeds. Instead of the bandoleer a gaming ring containing charms was sometimes worn on the arm. Each medicine man had a bag, generally made from the skin of an animal tanned whole, in which he kept his roots, paints, white clay, and other objects used in working his cures. The latter varied with the individual, but usually consisted of deer tails, the leg bones and claws of eagles, human bones, dried fingers, and very often the maw stone of a buffalo. The last was greatly valued, as it was supposed to contain the life or soul of the buffalo. The medicine men's bags with their contents were usually handed down from father to son, or were given to a newly initiated medicine man by his instructor.

The methods used to work cures varied with the nature of the disease and the customs of the medicine man. Diseases of unknown origin and those ascribed to witchcraft could only be treated by some one who could work a counter spell. Such diseases were usually eradicated by sucking a feather, small stone, blood, or some other object from the patient, singing and the shaking of a rattle being part of the performance. The object sucked out was always thrown into the fire and consumed so that the seat or cause of the trouble could not enter again into the patient or into any one else. All medicine men knew more or less of roots and herbs, which they administered as teas or in powdered form. The pay of the medicine man, which was given him when his services were no longer required, varied with the wealth of the patient. It sometimes consisted of buffalo robes and parfleches of dried meat, but was more often a sack of corn or a few strands of dried, braided pumpkins. He was paid even when he failed to work a cure.

The supernatural beings from whom the Pawnee medicine men derived their powers were, for the most part, identified with animals. Not all animals were able or willing to confer power, and there are some indications that all those recognized as guardians were related to one or another of the four supernatural beings in the west, the messengers of the Evening Star. It was believed that every man passed at birth under the influence of some supernatural being. No one knew who this guardian was, but he would manifest himself later in the man's career. He was usually discovered when the man fell sick during childhood. Medicine men were sent for, and the guardian of the one who was to be able to make the cure was thereby shown to be the guardian of the child. If, on reaching manhood, the boy desired to become a medicine man, he would seek to acquire powers from his guardian.

The powers conferred by the supernatural beings were of three sorts, power to cure the sick, power to perform feats of magic, and power of a third sort. called pikawiu, for which there is no equivalent in English. Of these, the curative power was considered by far the most important. The ability to perform feats of magic was simply a tangible evidence that the medicine man possessed the knowledge which would enable him to cure the sick. The third sort of power resembled hypnotism in some of its manifestations. By it the medicine man was enabled to subjugate the will of another to his own and to render his patient passive during ceremonies so that his power could go to the soul of the patient and remove the evil influence which was at the root of the disease. The pikawiu power was also likened to an arrow or bullet in its ability to cut off life. Medicine men could throw this power into an enemy as one would shoot an arrow, and the individual attacked in this way was helpless until some other medicine man, who understood the power. exercised his magic to draw it out. Among the Pawnee there was a class of men and women, not true medicine men, who possessed this power and used it for evil

purposes. Their guardians were certain animals which were conceived of as having evil spirits. They were recruited from the lower classes in the tribe, and were feared and disliked by the better element. Like the medicine men, they were organized into a society, but nothing is known of their ceremonies.

The Pawnee medicine men were organized into a number of societies which were united by certain secrets which they had in common. In addition to these secrets, which were known to all medicine men. but concealed from the rest of the tribe, each society and even each member had individual secrets. oldest of these societies was that of the Pumpkin Vine village all of whose members were said to have originally been medicine men. Its members derived their powers from a number of different guardians. In the other medicine societies, which were organized at a later date, all the members derived their powers from the same guardian. A man might become a medicine man as the result of a supernatural experience during which powers were conferred upon him directly by his guardian. Such experiences were sought through long continued prayer and fasting. More commonly, when a man desired to become a medicine man and had determined his guardian, he applied to some medicine man who had derived his powers from that being, and asked for instruction. If the medicine man believed him to be sincere and was willing to accept the gifts which he offered in payment, he received him as a pupil and, at the next meeting of the medicine lodge, took him into the lodge with him and instructed him. The lodge sometimes continued in session two months; and during this time, as part payment, the medicine man exercised the rights of a husband toward his pupil's wife. Often a medicine man would have several pupils whose wives would remain with him in his booth in the medicine lodge. He might instruct them also if he

wished, and in this way the women learned his secrets and became able themselves to practice medicine. The origin of the medicine societies is described in the following legend:—

"Once there was a man who lived alone, and did not mingle with the rest of the tribe. One night he had a wonderful dream. He dreamed that he stood on the bank of a wide river, and that a water monster came to the surface and spoke to him. He was so much impressed by this dream that he decided to seek for the river. He had several pairs of moccasins made, filled them with dried meat and parched corn, and started out, traveling eastward. He traveled for many days until he came to a great stream of water which he called Kits-ta-rux-ti ('the Wonderful River'). He stood upon the bank looking down, and all at once the water monster he had seen in his dream rose to the surface. It was very large and long. On its head was hair of many colors, and around its mouth were many-colored feelers. It did not speak to him, but dived, and the man leaped into the river after it. He found himself in a lodge of animals. Beside the altar were an owl and a beaver, while all the other animals sat around in a circle. Near the entrance were two ponds and by each of these two big geese. In the west of the lodge sat a woman. The water monster which had led him to the lodge of the animals lay to the south of the entrance, and acted as spokesman for the other animals. He said, 'My son, I come to you from the Big Waters. I was sent to you by Tirawa to instruct you and to tell these animals to instruct you in their mysteries. When you go home, tell your people to make an image of me and lay it in the lodge as I am now lying. The fireplace you see is not a fireplace, but a wonderful turtle. The woman sitting in the west is not a woman, but a thing of clay. She is a witch woman. The geese that stand by the ponds, when they flap their wings, make a noise

that can be heard in the heavens. Their noise wakens the gods to a remembrance of their promise to pity mankind and give them power.'

"When the water monster had told the man these things, the other animals came forward one by one, and also taught him their mysteries. When all had finished, the water monster told the man to go home and build a lodge like the lodge he was then in. He was to live in this lodge alone, and the water monster would come to him in his dreams and tell him what to do next. The man left the animals' lodge and went home. He built himself a lodge of willows, and in it he made an image of the water monster. The image was complete except for one thing. The monster had something white on its head, and the man did not know what to use for this. In the night the monster came to him in a dream and told him that he must go upon a high hill and catch eagles. He was to dig a pit three or four feet deep and cover it with branches. He must then kill several rabbits, skin them, and lav them on the branches. He was then to crawl into the hole and wait there until an eagle came down to seize the rabbits.

"The man did all this and he was crouching in the hole when he heard a noise like the wind. He looked up through the branches and saw it was an eagle flying down to get the rabbits. When it settled and began to eat, the man slipped his hand between the branches and grasped its legs. He drew it down into the pit and wrung its neck, then straightened the branches and waited for another. After a time a second came, and he killed that also. Then he carried them home and stuck their downy white feathers on the head of the image with blue mud. The image was thus completed.

"Every night after this the man slept in the lodge with the image and had dreams of the monster. In these dreams the monster told him how the ceremonies of the medicine lodge were to be performed. At last it told him to prepare for another journey. He must go east again, but to a different place, and there the animals would give him many things. The next day the man set out and went east until he came to the place where Freemont, Nebraska, now is. There he camped on the high bank of the Platte River.

"There was an island in the river, and the man saw, as soon as it was dark, that sparks of fire were coming up from it. He heard mysterious noises of drumming, singing and shouting, and then the rhythm of a dance. In the water he could see fish swimming about with fire in their mouths. He watched and listened for a long time, then he fell asleep. The island was another lodge of the animals, and when he awakened, he found himself inside. In the lodge he saw the beaver, the owl, the otter, the ermine, the bear, the buffalo, the wolf, the mountain lion, the wild cat, and all sorts of birds. He stayed with them for many days, and they taught him more mysteries. At last they told him to go to a nearby hill where they had cleared a site for a medicine lodge. The deer led him from the animals' lodge and put him safe on the dry land. When he came to the place for the medicine lodge, he found everything ready. All the animals had cleared away the grass. The badgers had dug the holes for the posts, the beavers had cut them down and peeled them, and the bears and mountain lions had carried them up the hill. The animals helped him to raise the framework and told him how to lay on the willows and grass and cover the whole with earth. They then told him to return to his village and to tell the chiefs to bring the people to the new place, which had been selected for them by the animals.

"When the man arrived at the village, he sent some one to ask the chiefs to come to his lodge. When they had entered it, he told them that he had a message for them from the animals. They were to bring the village to the new place. The man told what the animals had done for him, and how they had built a new kind of house, and wanted the people to live in houses of this sort and keep in them the sacred things which they would give them. Before the animals made this house, the Skidi did not know how to build earth lodges. The chiefs listened to him and were glad. They said they would obey the animals.

"That night the man dreamed that, before the tribe set out for their new home, they must tear down the walls of his willow lodge and take the image of the monster and set both up in the river, just as they had been set up on dry land. By this they would show the animals in the water that they were trying to do as they had been told. When they had done this, they broke camp and moved down the river to the new place. They made their camp just to the east of the lodge the animals had built. All the people helped him to finish it in the way the animals had told him. When it was completed, he burned sweet grass in it to make it a sweet-smelling place.

"That night there were great noises heard in the island which was close to the village. The man waited in the new lodge, and the animals came and told him what to do next. They said that opposite the entrance of the lodge was to be the holy place. He was to dig a fire place and model around it a turtle with its head toward the east, its tail toward the west, and its legs toward the four world quarters. He was to make another image of the monster and lay it with its head and tail near the entrance and its body running around the lodge. He was also to make an image of the witch woman, like that he had seen in the first animals' lodge, and place it in the west. Lastly he was to tell the people to kill different kinds of birds and hang their skins from the posts of the lodge. The people helped

him to do all these things. When the lodge was ready, he went down to the river and waited until night. The animals took him into their lodge once more, and there he saw the loon standing in front of the altar and several loon skins lying at one side. The animals gave these to him and told him how they were to be set up, and taught him certain songs he was to sing.

"The man lived alone in the lodge for a long time. The animals came to him from the river at night and took him around over the country, showing him the different roots and herbs and telling him their uses. After a while he invited a few other men to come to his lodge and instructed them in the mysteries which had been taught him by the animals. In this way they also became medicine men. They stayed in the lodge, and whenever they went out, they painted themselves with blue clay and put eagle-down on their heads. Two of their number were selected as messengers and servants. One of these wore the skin of the magpie, and the other that of a muskrat for the magpie and muskrat were the errand men of the animals' lodge.

"In the autumn, when the crops had been gathered, and many buffalo had been killed, these first medicine men invited other men of the tribe to come to the lodge and learn the mysteries. These men were told to leave the village, purify themselves, and fast for four days. When they came to the medicine lodge, the man who had built it sang a song and recited a ritual, and then told them to go to the river bottom and cut young willows and cotton woods. One man he sent to the east to cut a cedar tree. They brought the trees to the lodge and with the willows and cottonwoods they made little lodges around the inside of the large building. The cedar tree was set up to the north of the entrance, and a little lodge of cedar bows was built on the south side. When the lodges were finished, the leader of the medicine men called a man from each lodge to him and

gave him the skin of the animal which was to be the guardian of that lodge. The men stayed in the little lodges, fasting and singing until they fell from exhaustion, and went to sleep. When this happened, the leader took the skin of the animal to whose lodge the man belonged and laid it on him. This animal would tell the man in a dream what he was to do. When he awoke, he would tell his dream and would find that he could do this thing.

"After this had gone on for some time, the leader selected a night to have the mysterious dance. Before they commenced, he stood in front of the altar of loon skins, given him by the animals, and called the men to him one by one. He embraced each and breathed into his mouth. Then he went and sat by the altar. He had taught them a song, and now each man put on the skin of his guardian animal and began to sing this song and dance. At a certain place in the song every one of them fell to the ground as if shot. When the song was ended one of the men got up. He saw something lying beside him that looked like a small oval fragment of clear ice. Each of the other men found a thing of the same sort beside him, and all of them laid these things in a line on the west of the fire place. The leader told them that these things had been given to them by the animals. They must swallow them, and then they would have the power to hypnotize and influence the people. They did this and returned to their small lodges.

"They stayed in the big lodge for several days more, trying their powers and doing all sorts of sleight of hand. When the last day of the ceremony came, they all dressed up according to the animal that was their guardian. They went out and marched around the lodge once, with two men carrying loon skins from the altar in the lead. Then they entered the lodge again and crowded around the fire place, stamping to

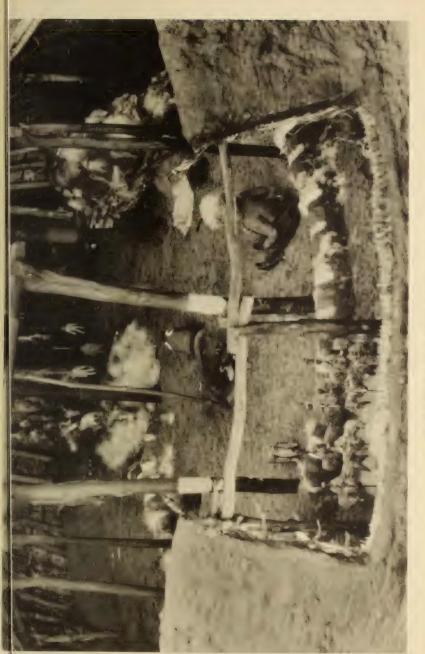
awaken the turtle. Then they passed out of the lodge, dancing, and each man imitating his guardian animal. As they went, they did all sorts of sleight of hand so that the people could see they had magic powers. When they had shown their powers to the people, they entered the lodge once more and sang songs and imitated the cries of their guardians. They made a great commotion so that the people outside could see ashes flying up through the smoke-hole. That night they did more sleight of hand tricks in the lodge, and sang and worked magic until about two o'clock in the morning. Then they tore down the little lodges and carried them and the images of the water monster and witch woman down to the river. As they went along, they shouted and sang and hypnotized one another. They threw the mysterious things that gave them hypnotizing power into one another, and the men who were struck fell down as if shot. The rest of the village looked on, and were mystified by the wonderful things they did. When they came to the river, they put the little lodges and the images in the water in the positions they had had in the big lodge.

"When they had returned to the medicine lodge, the leader told them that they were to hold dances in the winter and spring and after the first thunder, but they were not to show their powers or do sleight of hand at these times. The great dance was to be in the fall, and then they would do sleight of hand, and work magic of all sorts and renew their powers. He told them to go back to their families and build themselves earth lodges like the medicine lodge. He went on living alone in the medicine lodge.

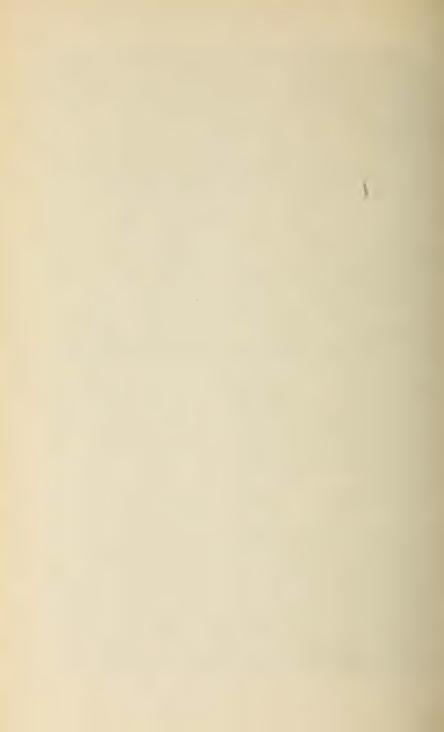
"The people lived in that place for a long time, and every fall they built new images in the medicine lodge and had their ceremonies. Each time the ceremonies lasted two or three months. Other men found other animals who gave them powers; and when the lodge was in session, they would come in and ask the medicine men to help them, and they would give them a place in the lodge. In this way the society grew. People from other bands also heard about it and came begging to learn the mysteries. The medicine men taught them, and they went back to their own people and started other medicine lodges."

The ceremonies of the historic medicine lodge agreed in a general way with those last described in the legendary account of its origin, but there were several features not mentioned in the story just given. The preparations for the great fall ceremony were begun while the people were still on the spring buffalo hunt. At this time the leading medicine men selected two members of the society to make two bows and four arrows. When these were completed, they were given to two other medicine men with instructions for one to kill a bull and the other a cow. The animals had to be killed with a single arrow, but it is said that because of the magic powers of the arrows the hunters never failed to do this. The bull's hide was to be used to cover the head of the water-monster image, the cow's hide to cloth the figure of the witch woman. Two more buffalo, also a bull and a cow, were then killed in the same way, the hide of the former being saved to make an image of the Morning Star, and that of the latter, to make nine small images which represented the important heavenly gods. When the buffalo had been killed, the bows and arrows were returned to the leading medicine men who placed them among their sacred objects.

On the return from the hunt, the four leading medicine men went to the medicine lodge and ordered that it be cleared for the ceremony. The same lodge seems to have been used for the ceremony year after year, but was occupied as a dwelling between cere-



INTERIOR OF MEDICINE LODGE, PAWNEE.
MINIATURE GROUP IN CASE 49, HALL 5.



monies. All the beds and other furniture were carried out by the women, and the floor swept. When this had been done, the medicine men seated themselves in front of the lodge altar and sent their errand men to notify the other members of the society. After these had arrived and taken their places, the leaders went to each of them in turn and directed them, in a whisper, to prepare for the ceremony by a four-day fast. Each man, when he received this notification, returned to his own lodge, took his medicine bag, and left the village to spend that time in solitary fasting and prayer. At the expiration of the fast they bathed in the river and returned to the medicine lodge, where each took his appointed place.

The following morning, all the members of the society went to the river bottom to cut willows and cotton woods for the small booths which were to be built inside the large lodge. When they reached the timber, one of the two leading medicine men prayed and offered smoke to the heavenly gods, while the other, after he had finished, paid the same honors to the earthly gods. When this had been done, the timbers were cut and carried back to the main lodge, and the booths built.

The next morning the image of the water monster was made, the leaders assigning to different men the task of getting the things needed and making the different parts. This image was nearly sixty feet in length and encircled the lodge, with its head and tail on either side of the entrance. The framework was made of pieces of ashwood lashed together with sinew. Over these a layer of grass was laid, and the whole covered with mud which was smoothed and painted in different colors. The mouth of the figure was so large that a man could crawl into it, and was provided with pointed teeth, also of ashwood. On each side of the mouth, long, slender willow-rods were stuck to represent

feelers. The head was covered with a black-dyed buffalo robe and painted and decorated with downy feathers. The image of the turtle, in the center of which was the fire place, and that of the witch woman, were made the next day. The woman's image consisted of a willow frame covered with grass and surfaced with clay. The features were modeled, and the eyes were made with pumpkin seeds blackened in the center. A buffalo scalp was placed on the head, and to this were attached long braids of human hair which hung down to the knees. The figure was dressed in a buffalo robe.

When the images had been made, a ceremony was held by which each of the medicine men received power from either the monster or the witch woman. Some chose one, and some the other. On the day following. they went to cut the cedar tree which was to be placed just inside the entrance. When they found a suitable tree, they formed a circle around it, prayed to it, made presents to it of robes and other things, and finally took power from it. When this had been done, they cut it down. As it fell, they began to hypnotize each other and work sleight of hand. They then picked it up and carried it back to the village singing. As they neared the village, a second party of medicine men came out to meet them, and began to hypnotize them and try to drive them back. The party with the tree were more powerful, and gradually drove the others back to the edge of the village. There the tree was laid down, and all the people came and threw offerings on it. These offerings were gathered up, and were finally given to the medicine men. The tree was then taken to the lodge and set up, and its branches were covered with white downy feathers. That night they made the images of the Morning Star and the heavenly gods. These were flat pieces of hide, cut in the outline of a man. The image of the Morning Star was fastened to a long pole

and raised above the smoke-hole just before the star rose. The other images were fastened to the tops of the main posts or on a cord running across the upper part of the lodge.

It is uncertain at what stage in the ceremony the altar of loon skins was set up, but it seems to have been after the various images had been made. The sticks bearing the skins were thrust in the ground on the west side of the lodge, and the space between them sprinkled with water and then covered with downy feathers. When this had been done, the leader of the medicine men raised his face to the sky and cried, "Father, the water birds and the water, their dwellingplace, now stand on the altar. Give us plenty of rain this summer." Then dropping his voice to a whisper and bowing down to the ground, he said, "Mother Earth, the water birds and the water, their dwellingplace, are now upon you. Let our crops grow so that we may be fed." When he had done this, he went outside the lodge and called upon all the gods to give power to the loons so that they, in turn, could give power to the people.

At dawn of the day following that on which the last of the images had been made and set up, the various medicine men dressed themselves to represent their guardian animals and marched, in order of the importance of their guardians, around the outside of the lodge and then around the inside. They did this four times, dancing and imitating the cries and actions of their guardians. They then held a feast in the lodge. That night they once more marched out in procession and visited all the lodges which contained sacred bundles, dancing in each. When they had returned to the medicine lodge, the leaders selected certain medicine men to go through the village once more, visit every lodge, and report if any one was sick. When

the report had been made, other men were sent to cure them.

The next morning, a number of women were summoned to the medicine lodge and told to go into the timber and get loads of wood. When they returned with their burdens, they were brought into the lodge. fed, and instructed in some of the mysteries. Then they returned to their homes. In the afternoon the medicine men once more dressed to imitate their guardians and came out of the lodge, dancing and performing various sleight of hand tricks. The favorite trick seems to have been to thrust long rods down their throats. They repeated the outside performance four times. That evening they built a great fire inside the lodge and invited all the people to an exhibition of sleight of hand. These performances were repeated every night for a month or more, and it was during this time that new medicine men were initiated.

When a man desired to join the medicine lodge, he told his relatives and friends, and they helped him to gather property of all sorts. When he had enough, he went to the lodge, taking the gifts with him, and approached the man from whom he wanted to learn the mysteries. He passed his hands over the man's head and arms and said, "Medicine man, I am poor. I stand before you a poor man wanting to learn the mysteries you possess. Look upon these gifts which I have brought you." When he had done this, he presented the medicine man with a filled pipe. If the latter was willing to teach him, he accepted the pipe and took the young man into his booth with him.

At the conclusion of the ceremonies, the booths and images were removed from the lodge, carried down into the bed of the river and placed in the shallow water in the same relative positions they had occupied in the lodge. As the procession went down to the river, the medicine men mesmerized one another, and performed sleight of hand. It was customary, before the witch woman's image was placed in the water, for some woman among the bystanders to remove all her clothing and ornaments and place them upon it. When this ceremony was finished, they returned to the medicine lodge, offered smoke to the animal gods, and sprinkled the floor of the lodge with water to cleanse it and free it from the powers that had been summoned there during the ceremony. After the lodge had been purified in this way, the medicine men held a feast and returned to their homes. The two medicine men to whom the altar belonged remained behind to take it down and roll the various objects up in the bundle in which they were kept between ceremonies. This completed the ceremony, and the owners of the lodge were free to live in it as before.

In addition to the serious performers in the medicine men's ceremonies there were certain men, called *kitscoa*, who acted as clowns. They wore masks made from corn husks, rawhide, wood, and feathers, dressed grotesquely, and daubed their bodies with mud. It seems to have been their duty to perform strange antics during the ceremonies to amuse the people, and particularly to imitate in a mocking spirit the serious acts of the others. They were said to represent hairy dwarfs or supernatural beings who had mysterious ways and of whom the people were afraid. Similar clowns play an important part in the ceremonies of some of the Pueblo tribes.

The function of the medicine men's ceremonies was threefold. By them they renewed their powers, drove disease from the village, and, by means of their sleight of hand performances, convinced the people that they really possessed the supernatural powers at-

tributed to them. The ceremonies also possessed certain social functions, for the spectators included women and children as well as men.

This account has been compiled from the unpublished notes of Dr. G. A. Dorsey.

RALPH LINTON

The Use of Sago in New Guinea

BY

ALBERT B. LEWIS

Assistant Curator of Melanesian Ethnology





FIELD MUSEUM OF NATURAL HISTORY

CHICAGO







POUNDING OUT SAGO PITH. THE HARD OUTER PORTION OF THE TRUNK HAS BEEN REMOVED ON TOP. SISSANO, NORTH COAST.



PLACING THE SAGO MUSH ON A BANANA-LEAF PLATE. THE STIRRING PADDLE, COCONUT DIPPER, AND HOT-WATER POT ARE SEEN AT THE LEFT.

SISSANO, NORTH COAST.

FIELD MUSEUM OF NATURAL HISTORY DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1923

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NUMBER 9

. Use of Sago in New Guinea

The obtaining of a good and sufficient supply of food in New Guinea is not such a simple and easy matter as the popular impression of South Sea life might lead one to expect. Nearly all the food of the people is vegetable: and the clearing of the forest for their gardens, the preparation of the soil, the planting and the protection of the growing crops against rapidly growing weeds and wild animals, chiefly pigs, demand much hard work and constant vigilance. Adding to this the fact that their only tools and implements are of stone and wood, and that all the work is hand-work, as there are no domestic animals to help, one is forced to admit that the New Guinea native is no exception to the rule that "in the sweat of thy face shalt thou eat bread." or whatever he can get to take its place.

There is still, however, a certain amount of food obtained from wild plants, and among these the sago palm is by far the most important. The palms from which most of the sago is obtained belong to the genus *Metroxylon*, and grow in low and swampy regions, such as the valleys and deltas of many New Guinea rivers. Many tribes living in such regions subsist largely on sago and fish, and even people from some distance may come thither, either to trade their own products for sago with the local inhabitants, or, in uninhabited districts, to manufacture it for themselves. Sago, as prepared in New Guinea, is not the pearl sago of commerce, which is frequently only potato starch

anyway, but is a fine meal of almost pure starch, which on drying hardens into a more or less solid mass. This is broken up and pulverized before cooking.

This starch is the reserve food supply of the palm, which it stores up in its trunk during many years of growth, for the consummation of its purpose in life,—the production of flower, fruit, and seed, which it does only once, and then dies, like the century plant. It is necessary, therefore, in order to get the maximum amount from each palm, to cut it down just before it puts forth its flower or fruit stalks, as these grow very rapidly, and soon use up the reserve supply of starch which has been accumulated during all the years of slow and steady growth.

The trunk or stem of the sago palm, when full grown, is from 20 to 25 feet high, with a diameter of from 11/2 to 2 feet. There is a hard outer rind or shell about an inch or less in thickness, while the whole inner portion is filled with a soft white substance about the consistency of cheese, with numerous coarse, rather brittle fibers running through it. These have to be removed before it can be used, so the natives mash it up and wash out the starch. This process is much the same throughout the island. though the details vary somewhat in different regions. As the palms grow out in the swamps, a suitable tree must first be found. This is then cut down, and the trunk may be either cut into sections, and these floated to a regular working-place near the village, or the washing out may be done on the spot, as the places where they grow are usually above water and fairly dry during the dry season. In either case the hard outer rind is split open with heavy, pointed stakes, and a portion pried off, so the pith is exposed. This is then pounded and mashed with a peculiar hammer made especially for this purpose, having at

the lower end a cup-shaped depression with sharp edges. This cuts out the pith and mashes it at the same time. The cutting head may be of hard wood, bamboo, or stone, according to the locality.

The mashed pith is thrown into baskets and carried to the washing trough, which is made out of the base of a sago-leaf stem. As the base of the leaf stem clasps the trunk, it is quite large, and the stem for a considerable distance is hollowed out on one side, and so makes an excellent trough. The portion used is usually from 8 to 10 feet long, and is set up on stakes so that one end, usually the larger, is lower than the other. In the trough, near the lower end, is fastened the strainer, usually made of a piece of the fibrous leaf sheath of the coconut tree, though a closely woven bag sometimes serves for this purpose. The mashed pith is dumped in the trough and water poured over it to wash out the starch. During this process it is worked with the hands or pounded with a stick to break it up still more, so all the starch can be removed. The water is obtained from a hole near-by, and is dipped up with a dipper of coconut shell on a long handle; or it may be brought from the near-by river in a water bucket, made of a leaf or bud sheath. This same material forms the shallow basin into which the starchy water runs, and where it stands till the starch settles to the bottom. Near the mouth of the Sepik River a basket is used as a strainer without any trough. The basket is then set on an open platform, with the settling pan underneath. The water is poured into the basket, which is worked and squeezed by hand, the starchy water running out into the basin below. When a considerable quantity has been accumulated in this manner, it is partially dried, and packed into coconut-leaf or sago-leaf baskets to be taken to the village, or traded to neighboring tribes. In these baskets it may be kept a short time till used or it may be packed away into casks made of bark, leaf sheaths, or even a section of a sago trunk. These stand in a corner of the house, or under special sheds. The sago is packed down tightly, and is covered on top with leaves or pieces of leaf sheaths, weighted down with stones, and is removed as needed. It may be kept in this way several months.

Sago is cooked in a number of different ways, but it is usually made into a sort of stiff mush with boiling water. The meal is first mixed with a small amount of cold water, and boiling water is then poured in, stirring continuously until it thickens. It is then taken out with two short sticks, and served on wooden platters or bowls, or on large leaves, such as those of the breadfruit tree. As the sago alone is quite insipid, something else, such as a little fish, crabs, prawns, or even some greens, if nothing else is available, is added as a relish.

While this is the usual method of preparing sago. other methods are also used, especially when pottery is lacking. The sago meal may be cooked or roasted in bamboo tubes (Fig. 1), made into cakes and cooked over an open fire, or like waffles by means of two earthen bowls, fitting into each other. In this case both bowls are heated over a fire, and in one of these is spread a thin layer of the moistened meal. The other bowl, now hot, is placed in the first, on top of the laver of meal, which is thus heated on both sides. While this is getting properly cooked, another layer of meal is placed in the upper bowl; and when the first is done, the lower bowl is removed and placed on top of the upper one with its meal-cake, which is then cooked in its turn, and the process continued as long as more cakes are desired. The cakes are often doubled over whatever relish may be added, so as to make a sort of sandwich. In western New Guinea

an earthen or stone oven is in common use. This is a foot or more long by six to eight inches high and as many wide, with a number of rectangular openings, or holes on top, about an inch wide, in which the moist meal is placed (Fig. 2). This is then placed over the fire, and thick square or rectangular cakes are thus produced.

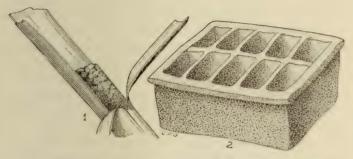


Fig. 1. Roasted sago in bamboo, broken open. Kerema district, Papua.Fig. 2. Earthenware oven for sago cakes. Kokas, Dutch New Guinea.

This method of cooking sago, as well as the general method of obtaining the meal, does not differ greatly from those used in the Malay Archipelago, from where the use of sago was probably introduced into New Guinea. The methods, however, are usually simpler, in that the objects used, such as the washing trough, strainer, dipper, settling pan, etc., are supplied by nature from near-by objects with very little modification.

To one traveling in New Guinea with native attendants the local food supply is always a subject of interest, as one depends on that as far as possible to relieve him from the necessity of carrying extra provisions. Sago is used extensively chiefly in those districts which are more or less unsuited for the production of the ordinary garden or field crops, such as the swampy regions where the sago-palm thrives; but it also has one advantage over most garden vege-

tables, such as taro, in that it can be kept for several months, and a reserve supply of food can in this way be accumulated. This makes it suitable for trade, and for the use of such peoples as those living on the small islands of Berlin Harbor, which are too small to support gardens of any size, and are almost entirely cut off from the mainland during the rainy season because of the high winds and heavy seas. Hence these islanders depend very largely on sago, which they either purchase with the articles which they manufacture, or else make themselves by crossing over to swamps of the mainland during the dry weather. The sago thus obtained is packed away in the large casks already mentioned, for use during the rainy season. I remember, while visiting one of these islands, trying to buy a shell arm-ring which was partly finished, but which the maker and owner refused to sell on the ground that he depended on that arm-ring to furnish him with a large portion of his food for the coming rainy season. For one finished arm-ring he could buy nearly half a ton of sago, or about thirty packages or baskets of sago, each containing 25 to 30 pounds.

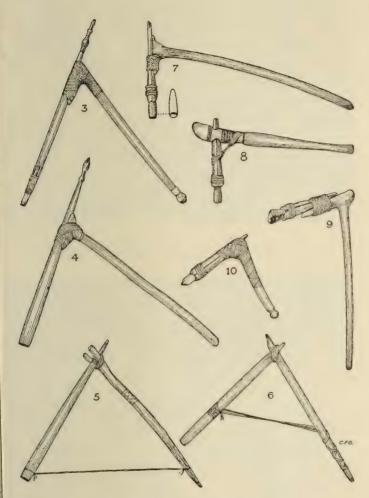
Probably the most extensive trading voyage occurring regularly in New Guinea is for the purpose of obtaining sago. This is the annual visit of the natives of Port Moresby and vicinity to the deltas of the large rivers entering into the Papuan Gulf, a distance of 200 miles or more. The region around Port Moresby is not particularly good for vegetable crops, so the inhabitants make these trips to obtain sago in exchange for earthen pots of various sizes, which they make in great quantities. They also carry into the gulf numbers of stone adze-blades, shell arm-rings and ornaments of various kinds, which they have obtained by trade from the eastward. Since there are no good forest trees for canoes in their

neighborhood, they also buy in the gulf the large dugouts which they use for these voyages. These dugouts (asi) are not used singly, but a number of them are fastened together, and a platform built over the whole so as to form a single craft, known as a lakatoi. Up to a dozen or even more dugouts may be used in a single lakatoi, which is usually supplied with two masts and crab-claw shaped sails made of mats. As they can only sail with the wind, and are too heavy to paddle, the voyage always occurs at a definite time each year. The start is made about the first of October, toward the close of the season of the southeast trade winds, but with sufficient time to reach their destination before these cease. The return voyage is made with the northwest winds, the whole time they are away being about three months. The average number of lakatoi making the trip each year has been about twenty, each with a crew of twenty-five to thirty men, and carrying between one and two thousand pots of various sizes. On the return voyage they are loaded with sago, each dugout (asi) being capable of carrying about two and a half tons, so that a lakatoi of 10 asi would bring back about 25 tons of sago all carefully done up in bundles or packages of from 40 to 80 pounds weight, each one of which has been purchased with a single pot.

In the delta country of the Papuan Gulf, where sago is made in large quantities, both for home consumption and for export, the washing troughs are usually set up along the bank of the river or water courses, and the sago trunks floated to this place before the sago is pounded out. In some places I have seen dozens of these washing troughs lining the bank of a stream. The hammers used in this region are made of two pieces of wood. The hammer proper is from 2 to $2\frac{1}{2}$ feet long, and rather carefully cut out of a straight piece of wood. It is round, from 2 to $2\frac{1}{2}$

inches in diameter at the bottom, and gradually tapers to a point at the upper end. The bottom is hollowed out somewhat with a sharp edge all around, as before mentioned. The handle is usually a little shorter, and may be forked or split at the upper end (Purari Delta and eastward—Fig. 5), or merely a fairly straight piece of the limb of a tree, often with the bark still on (west of Purari Delta to the Fly River—Fig. 6). The two pieces are held together at the top or angle by a ring of rattan, into which they are inserted from opposite sides, and the outer ends then pulled around so as to tighten the ring, and held in place by a piece of rattan fastened to the two parts near the base. The strainers used in the delta country are rather long, narrow, soft, tightly woven bags, measuring about 7 by 15 inches when flattened out. These were not seen at Orokolo or farther east, where the usual strainer of coconut-leaf sheath is used. On the north coast of New Guinea around Berlin Harbor and farther west, the heads of the hammers are of stone, with handles similar to those used for the stone axes and adzes of that region (Fig. 7). Stone heads are also used around Humboldt Bay, with the type of handle peculiar to that region (Fig. 8). Farther to the east on both sides of the Sepik River the hammer is of wood, much like that on the south coast, but fastened to the handle the same as the holder for the stone axe-head is fastened (Fig. 4). Sometimes in this region (at Kayan, for example) a bamboo head is used (Fig. 3). A bamboo head is also used in the Admiralty Islands. In Huon Gulf a stone head is used in the ordinary axe-handle, but here the head is larger and roughly flattened instead of cup-shaped (Fig. 9). Often a stone axe which has been broken fairly straight across is used. Hammers with rough stones are also found on the Sepik River (Fig. 10).

ALBERT B. LEWIS.



SAGO HAMMERS FROM NEW GUINEA.

Fig. 3. From Kayan, North Coast, with bamboo joint for head. Fig. 4. From Mabuk, North Coast. Fig. 5. From Papuan Gulf, South Coast. Fig. 6. From Goari Bari, South Coast. Fig. 7. From Berlin Harbor, North Coast, with separate outline of stone head. Fig. 8. From Attack Harbor, with stone head. Fig. 9. From Lokanu, Huon Gulf. Fig. 10. From Jambun, central Sepik River, with crudely chipped head of quartzite.





WASHING SAGO IN TROUGH MADE OF THE BASE OF A SAGO-PALM LEAF. KIRAU, NORTH COAST.



COOKING SAGO CAKES BETWEEN TWO BOWLS. PILE OF COOKED CAKES AT LEFT, AND MEAL NEAR CENTER, ON PIECES OF PALM-LEAF SHEATHS.

SISSANO, NORTH COAST.



Use of Human Skulls and Bones in Tibet

BY

BERTHOLD LAUFER
Curator of Anthropology

M 10



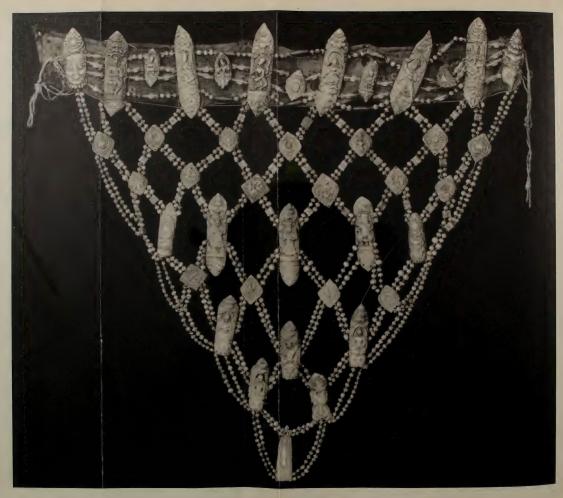


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CEREMONIAL B



CEREMONIAL BONE APRON, TIBET.
GIFT OF ARTHUR B. JONES, 1922.

FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1923

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Use of Human Skulls and Bones in Tibet

Among the many customs of Tibet none has attracted wider attention than the use of human skulls and other bones both for practical purposes and in religious ceremonies. Weird stories to this effect were brought to the notice of the occidental world by mediæval travellers who visited Cathay or the court of the Great Khan during the thirteenth and fourteenth centuries. In the Tibetan collections (Hall 32, West Gallery) obtained by the Blackstone Expedition in 1908-10 may be viewed (Case 70) bowls consisting of a human cranium, from which libations of liquor in honor of the gods are poured out on the altars of the Lama temples. Some of these skull-bowls are elaborately mounted and decorated, lined with brass or gilded copper and covered with a convex, oval lid that is finely chased and surmounted by a knob in the shape of a thunderbolt (Sanskrit vajra, Tibetan dorje), the symbol of Indra which is in constant use in nearly all Lamaist ceremonies. The skull itself rests on a triangular stand, cut out with a design of flames, at each corner of which is a human head. These settings are frequently very costly, being in gold or silver, and studded with turquois and coral.

In the case (68) showing musical instruments which are used for worship in the Lama temples are on view small tambourines made of two human skull-caps cemented together by means of a wooden disk.

These drums are shaken while reciting prayers, to mark the intervals between different incantations. There are trumpets made of human thigh-bones, the bones of criminals or those who have died a violent death being preferred for this purpose. These trumpets are consecrated by the priests with elaborate incantations and ceremonies. In the course of this ritual the officiating priest bites off a portion of the bone-skin; otherwise the blast of the trumpet would not be sufficiently powerful to summon, or to terrify the demons. On one side the trumpet has two apertures styled "nostrils of the horse." This is a mythical horse believed to carry the faithful after their death into Paradise; and the sound of this trumpet reminds the people of the neighing of this horse.

A most interesting addition was recently made to this group of objects by the exhibition (in Case 74) of a very valuable bone apron composed of forty-one large plaques exquisitely carved from supposedly human femora and connected by double chains of round or square bone beads. Such aprons are used by magicians in the Lama temples during the performance of mystic, sacred ceremonies accompanied by shamanistic dances, chiefly for the purpose of propitiating evil spirits and exorcising devils. The plaques are decorated with figures of Çivaitic and Tantric deities, some of which are represented in dancing postures.

At the outset, these relics of an age of savagery and a barbarous cult leave no small surprise in a land whose faith is avowedly Buddhistic, and whose people have made such signal advances in literature, poetry, painting, sculpture, and art industries. Buddha was an apostle of peace and universal love, averse to bloodshed, and forbidding the taking of human and animal life. He repudiated all outward ceremonies and offerings, preaching salvation through the efforts of the

mind and the perfection of the heart. But there is room for many extremes in both nations and individuals.

Friar Odoric of Pordenone, who travelled from 1316 to 1330, dwells at some length on the burial customs of the Tibetans, and tells the story of how the corpses are cut to pieces by the priests and devoured by eagles and vultures coming down from the mountains: then all the company shout aloud, saving, "Behold, the man is a saint! For the angels of God come and carry him to Paradise." And in this way the son deems himself to be honored in no small degree, seeing that his father is borne off in this creditable manner by the angels. And so he takes his father's head, and straightway cooks it and eats it: and of the skull he makes a goblet, from which he and all of the family always drink devoutly to the memory of the deceased father. And they say that by acting in this way they show their great respect for their father. It must be added, however, that this account is not based on personal observation, but on hearsay. William of Rubruk, a Flemish Franciscan, who visited the court of the Mongol Khan in 1253. mentions the same Tibetan practice and admits that he received his information from an eve-witness. The peculiar burial customs were a characteristic trait of the Tibetans by which their neighbors were deeply struck, and the story of this ceremonial freely circulated among the Mongols who were doubtless inclined to exaggerate also some of its features.

This Tibetan custom reveals a striking parallel to a record of Herodotus. In his account of Scythia, Herodotus (IV, 23) speaks among many other nations also of the Issedonians, who are located east of the Bald-Heads and were the farthest nation of which the Greek historian had any knowledge. "The Issedon-

ians," Herodotus relates, "have the following customs. When a man's father dies, all the near relatives bring sheep to the house: these are sacrificed, and their flesh cut into pieces, while at the same time the deceased man's body undergoes the like treatment. The two kinds of flesh are mixed together, and the whole is served at a banquet. The head of the dead man is dealt with in another way; it is stripped bare, cleansed, and set in gold. It then becomes an ornament on which they pride themselves, and is brought out year by year at the great festival which is observed by sons in honor of their father's death. In other respects the Issedonians are reputed to be observers of justice, and their women have equal authority with the men." Some scholars have assumed that the Issedonians represent a tribe akin to the presentday Tibetans or could even be their ancestors. Be this as it may, the coincidence of the fact of skullworship among the two tribes would not constitute sufficient evidence for this theory, as the same or similar practice is encountered among widely different peoples.

The preceding case presents a peculiar form of ancestral worship, the son being intent on preserving the most enduring part of his father's body as a constant reminder, and drinking from his skull in his memory on the day of his anniversary. This, without any doubt, has been an indigenous practice in Tibet of considerable antiquity. Aside from this we meet in that country the use of human bones for purposes which move along an entirely diverse line of thought.

The Jesuit Father Andrada, who visited western Tibet in 1625, observed that the Lamas, when engaged in prayer, were in the habit of sounding trumpets made of metal or the bones of the dead, and that the bones of human legs and arms served for making

these instruments. "They also have rosaries consisting of beads made from human skulls," he writes. "When I inquired why they employed bones for such purposes, the Lama who was a brother of the king, replied, 'The people, at the hearing of such trumpets, cannot fail to be mindful of death. For the same reason we avail ourselves of the bones of the dead for rosary beads. Finally, in order to be still more imbued with this melancholy and sad remembrance, we drink from a cranium." According to the same Lama, the idea of death, no less than prayers, contributes to restrain our passions and to regulate our conduct. "These cups of the dead," he remarked, "prevent the people from becoming too much addicted to worldly pleasures, which are uncertain and fugitive. so that the drink develops into a spiritual antidote for passions and vices." This manner of reasoning is not Tibetan, but is decidedly Buddhistic and, as everything else pertaining to Buddhism, has filtered into Tibetan thought from India.

At the present time, as far as observations reach, it is not known that Tibetans preserve the skulls of deceased relatives as drinking vessels, although it may still happen that bones of relatives are kept in houses from motives of religious piety. There are ascetics, however, who make use of human skulls as eating bowls, in the same manner as they make beads for rosaries out of bits of bones. But this custom bears no relation to the ancient family cult of skulls which. as we have seen, presents a form of ancestral worship. The leaning of the Buddhist hermit toward skulls moves along quite a different line, and is prompted by customs adopted by the Tibetans with the Civaitic worship from India. In this debased form of religion we find in Tibet numerous terrifying deities who wear wreaths of human skulls as necklaces, are clad with

human skins, or hold a bowl consisting of a cranium filled with blood. Such a bowl, for instance, is seen in the hand of Padmasambhava, who is still worshipped as the founder of Buddhism in Tibet (eighth century A.D.), and who besides the doctrine of Buddha introduced a system of wild magic and devil-dances connected with incantations and exorcisms (see image of Padmasamhava in Case 71, second shelf, east end).

In India, skulls were chiefly used by the Aghori or Augar, a Civaitic sect of Fakirs and religious mendicants, which has now dwindled down to a very few members. They used human calvaria as bowls for eating and drinking. This was done as a part of their practice of self-abasement, and was associated with the cannibalistic habits permitted and encouraged by those ascetics.

The Chinese pilgrim Hüan Tsang, who visited India in the seventh century, mentions "naked ascetics and others who cover themselves with ashes, and some who make chaplets of bone which they wear as crowns on their heads."

Amitābha, the Buddha of Endless Light (also called Amitāyus, "Endless Life"), who presides over the Paradise in the west (Sukhāvati), where every one of his devout adherents yearns to be reborn, was originally a deity of purely Buddhistic character, being represented with a bowl holding a sort of nectar which confers immortality upon his devotees. In course of time, this bowl was replaced by a cranium, and it became customary to offer the god a cranium with an invocation of divine blessing for the donor; thus, another custom came into vogue, to utilize human crania as receptacles for the wine or other liquid offered to the temple-statues of the gods. For the purpose of selecting proper skulls, the Lamas have developed a system of craniology which imparts in-

struction as to the distinctive symptoms of good and bad skulls and the way to obtain prosperity when once the characteristics of a skull have been determined. It is essential that a skull designed for an offering to the gods should be that of a person known to have been profoundly religious, or to have possessed other high qualifications, such as rank, nobility, wisdom, or learning. Failing such a skull, others may serve as substitutes, and elaborate rules have been laid down to determine those suitable for sacrificial bowls or as offerings to the gods. Skulls of women and children born out of wedlock are unsuitable for sacred purposes. Among the very best are skulls of a clear white color like a brilliant shell, or of a glistening vellow like gold, or like a jewel without unevenness. or of equal thickness and of small cubic capacity, or with a sharp ridge stretching far into the interior like a bird's beak or a tiger's claw, or hard and heavy as stone, or smooth to the touch and polished, or with no line on it save clearly defined sutures. These and similar instructions are contained in a small Tibetan book, which teaches the method of discriminating between good and bad skulls and how, by offering a skull (Sanskrit kapāla) to Amitābha, prosperity and worldly goods may be secured. This lore is not Tibetan. but has emanated from mediæval India. The background of the treatise in question is Indian: the Indian caste-system is in evidence, for the skulls of Kshatriyas, Brahmans, and Vaicyas are good, while those of common people and Chandalas are bad. There are indications from which a good skull may be told in a live person: if he has soft and smooth hair of lustrous black, if his forehead is broad and his eyebrows thick, if on his forehead there is a mark, if he has most teeth in his upper jaw, if the tip of his tongue can touch his nose (this is a peculiarity

possessed in even a greater degree by all Buddhas), if his voice is high-pitched and his complexion as fresh as that of a youth, if in walking he throws his left hand and left foot out first.

The ceremony of offering a skull to Amitabha is a complex and elaborate procedure, accompanied by a fixed ritual and many offerings of food arranged on the altar in a prescribed order. A thunderbolt wrapped around with strings of various colors is placed inside of the skull, the underlying idea being that a colored light will radiate from the heart of the officiating Lama, and conducted by the strings binding the thunderbolt will penetrate into the light emanating from the heart of the Buddha of Endless Light (Amitābha) whose statue is assumed to be alive. Through this optical contact and spiritual union, the god's soul will be aroused and communicate to the Lama innumerable blessings. From their united hearts will proceed a light which will remove the sorrows of the poor and fulfill all their wishes, and from the extreme end of this light will pour down a rain of jewels which will replenish all the regions of the world and the devotee's own abode. Holding the strings wrapped around the thunderbolt and raising the skull with both hands to his head, the officiating Lama proceeds to recite a prayer, the beginning of which is thus: "Descending from the wide expanse of heaven. Amitābha who art wise, who art the lord of wealth, whose body is as voluminous as the sun, who art full of precious sayings, thou with ornaments and garments of jewels, grant me thy blessing! Mighty one, grant me might! Bless me, thou powerful one! Thou glorious one, grant me blessings! Lord of life. give me life! Lord of riches, give me wealth, confer on me in endless amount all desirable worldly blessings!" Having thus implored the divine blessings, the

countenances of the gods in the temple-hall will show their pleasure by melting into light, which reaches to the heart of Amitābha and to the skull to be offered. The Lama then realizes that all his wishes have been fulfilled, and after an offering to the guardian and local deities, will wrap up the skull in silk coverings and hide it away in the store-house of the temple. The skull must be carefully concealed, and no one must be allowed to touch it; for in this case it would lose some of the qualities which it possesses, and the owner's luck would be impaired or perhaps even utterly destroyed.

A peculiar case has been recorded by the late W. W. Rockhill (Land of the Lamas, p. 273). In an uprising instigated by the Lamas in 1887 against the Catholic missionaries along the borders of eastern Tibet, the bones of Father Brieux killed in 1881 were taken from his grave, and his skull was made into a drinking-cup.

Whereas the use of enemies' skulls is extinct in Tibet, the idea itself is slumbering in the pictures and statues of Lamaist deities. A special class of these have been singled out to act as defenders of the faith and to destroy all enemies of the Buddhist religion. The main attribute of these militant demons is a wreath of human skulls surmounted by a thunderbolt. These skulls are naturally supposed to have been captured from enemies; they accordingly represent trophies and simultaneously convey a warning to others to avoid the same fate. Numerous examples of this kind may be seen in Tibetan paintings and statuary (cf. also the masks employed in the Tibetan mystery-plays, Hall I). In Case 80, at the north end of Hall 32, are on view several Tibetan sculptures on stone slabs. One of these, carved in black slate, represents a Dākini, a female sprite akin to our witches.

who holds in her left hand a skull-bowl filled with human blood; she has lifted the cover from the bowl, which she carries in her right hand. Her necklace consists of a row of human skulls.

In the Vinaya, the ancient code of monastic discipline of the Buddhists, monks are forbidden using skulls as alms-bowls, as was then customary among devil-worshipping sects.

The customs of a people may be better understood and evaluated by checking and correlating them with similar or identical usages of other nations.

The typical skull-bowl drinkers in times of antiquity were the ancient Scythians, Iranian tribes of roaming horsemen inhabiting southern Russia. Like the Malayans and other peoples, the equestrian Scythians, as described by Herodotus (IV, 64), were headhunters. The Scythian soldier drank the blood of the first man he overcame in battle. The heads of all slain enemies were cut off and triumphantly carried to the king; in this case only was he entitled to a share of the booty, whereas he forfeited all claim, did he not produce a head. The scalps were likewise captured and suspended from the horse's bridle; the more scalps a man was able to show, the more highly he was esteemed. Cloaks were made by many from a number of scalps sewed together. The skulls of their most hated enemies were turned into drinkingcups, the outside being covered with leather, the inside being lined with gold by the rich. They did the same with the skulls of their own kith and kin if they had been at feud with them and vanguished them in the king's presence. When strangers of any account came to visit them, they handed these skulls around, the host telling how these were his relations who made war upon him, and how he defeated them; all this was regarded as proof of bravery. The practice of

the Scythians in capturing and preserving the skulls of slain enemies was doubtless inspired by the widely prevalent belief in the transference of the powers of the deceased to the victor, who, in accordance with this conception, was enabled to add the skill, prowess and courage of his dead enemy to his own.

Livy relates that the Boii, a Celtic tribe in upper Italy, in 216 B.C., carried the head of the Roman consul Lucius Posthumius into their most venerated sanctuary and, according to their custom, adorned the cranium with gold; it was used as a sacred vessel in offering libations on the occasion of festivals, and served as a drinking-cup to the priest and overseers of the temple.

Paulus Diaconus, in his History of the Langobards, writes that Albion, king of the Langobards, used the skull of Kunimund, king of the Gepids, as a drinking-cup, after defeating him in battle in A.D. 566 and taking his daughter, Rosmunda, for his wife. On the occasion of a merry banquet at Verona he ordered wine to be served to the queen in this bowl and enjoined her to drink gleefully with her father. This brutal act led to the king's assassination in 573 by an agent of his wife. In the mediæval poetry of the Germanic peoples (Edda) there are several allusions to the use of cranial drinking-cups.

Krumus, prince of the Bulgars, defeated in three campaigns the Byzantine emperor Nikephoros, who was slain in A.D. 811. The Bulgar had a fine, silverlined drinking-cup made from his enemy's cranium. In A.D. 972 the Russian grand-duke, Svatoslav, succumbed in a battle against a Turkish tribe, the Pecheneg. It is recorded in the Russian chronicle of Nestor that Kurya, the ruler of the Pecheneg, had Svatoslav's skull prepared as a goblet trimmed with gold.

The fact that this was an ancient Turkish usage becomes evident also from the Chinese annals which have the following incident on record. ruler of the Hiung-nu (Huns), Lao-shang, who reigned from 175 to 160 B.C., had defeated the king of the Ta Yüe-chi (Indo-Scythians), he made a drinking-cup out of the latter's cranium. At a somewhat later date, when two Chinese envoys were sent to the Hiung-nu to conclude a treaty, they drank blood with the Turkish chiefs out of the same skull-bowl, in order to solemnize their vows. The sacrificial animal in this case was a white horse. Blood, as is well known, was of great significance with many peoples in affirming sacred agreements and keeping faith. According to the philosopher Huai-nan-tse, the ancient Chinese in such cases rubbed their lips with blood, while the inhabitants of Yüe (in southern China) made an incision in their arms.

The ceremonial use of human crania, consequently, must have been widely diffused in ancient times among Tibetan, Turkish, Scythian (that is, Iranian), Slavic, Celtic, and Germanic tribes. The custom is not restricted to the Old World, however; there are examples to be found among the natives of America as well.

Oviedo relates in his "Historia General y Natural de las Indias" that the Inca king Atabalida possessed a precious drinking-vessel made from his brother's skull. Along its edge it was mounted with gold, the skin with the smooth and black hair having been retained. The king would drink from this bowl on the occasion of festivals, and is was regarded as one of his greatest treasures and most highly esteemed. Why it was just the skull of his brother is not explained by the Spanish chronicler; nor is, as far as I know, any other instance of such a practice on record from ancient

Peru. Molina, in his "Historia de Chile" (1795), states with reference to the Araucanians that, after torturing their captives to death, they made war flutes out of their bones and used the skulls for drinking-vessels.

M. Dobrizhoffer, who worked as a missionary among the Abipones of Paraguay in the eighteenth century, gives the following account: "As soon as the Abipones see any one fall in battle under their hands, their first care is to cut off the head of the dying man, which they perform with such celerity that they would win the palm from the most experienced anatomists. They lay the knife not to the throat, but to the back of the neck, with a sure and speedy blow. When they were destitute of iron, a shell, the jaw of the palometa, a split reed, or a stone carefully sharpened, served them for a knife. Now with a very small knife they can lop off a man's head, like that of a poppy, more dexterously than European executioners can with an axe. Long use and daily practice give the savages this dexterity. For they cut off the heads of all the enemies they kill, and bring them home tied to their saddles or girths by the hair. When apprehension of approaching hostilities obliges them to remove to places of greater security, they strip the heads of the skin, cutting it from ear to ear beneath the nose, and dexterously pulling it off along with the hair. The skin thus drawn from the skull, and stuffed with grass, after being dried a little in the air, looks like a wig and is preserved as a trophy. That Abipon who has most of these skins at home, excels the rest in military renown. The skull too is sometimes kept to be used as a cup at their festive drinking-parties. Though you cannot fail to execrate the barbarity of the Abipones. in cutting off and flaying the heads of their enemies. yet I think you will judge these ignorant savages worthy of a little excuse, on reflecting that they do it from the example of their ancestors, and that of very many nations throughout the world, which, whenever they have an opportunity of venting their rage upon their enemies, seem to cast away all sense of humanity, and to think that the victors have a right to practice any outrage upon the vanquished. Innumerable are the forms of cruelty which the other savages throughout America exercise towards their slain and captive enemies."

G. F. Angas (Savage Life and Scenes in Australia, London, 1847) writes that the natives around Lake Albert and the adjoining portions of the Coorong in Australia used the skulls of their friends as drinking-vessels. After detaching the lower jaw, they fastened a bundle of bulrush fibre to them, and carried them, whenever they travelled, filled with water; always putting in a twist of dry grass to prevent the contents from upsetting. In another passage of his book he speaks of a girl who carried a human skull in her hand; it was her mother's skull, and from it she drank her daily draught of water.

It is assumed by some archæologists also that skulls were used as drinking-bowls by prehistoric man during the palæolithic and neolithic periods of Europe, merely for practical purposes. There was a time when primitive man did not yet understand how to fashion clay into pots and to bake clay into a hardened mass. Wherever nature offered gourds or calabashes or shells, he took advantage of such means; or vessels for holding and carrying water were made, as, for instance, by the aborigines of Australia, of the gnarls of trees, the bark covering the gnarls, or of a portion of the limb of a tree, or finally of animal-skins. Certain it seems that prehistoric man availed himself of

human crania for scooping and drinking water. Such brain-pans wrought symmetrically by means of stone chisels have been discovered in the pile-dwellings of Switzerland, as well as in the Magdalenian and Solutrean stations of the French palæolithicon.

It would be erroneous to believe that this "barbarous" practice was limited to prehistoric times and the "savage" tribes of ancient Europe, Asia, America. and Australia. Like so many other pagan customs, it has persisted until recently among Christian, civilized nations. Even within the pale of Christianity, the skulls of saints have been preserved and worshipped. The village of Ebersberg east of Munich, Bayaria, for instance, boasts of possessing for a thousand years the skull of St. Sebastian. It is kept in a special chapel erected in 1670; there, a silver bust of the saint which hides the relic is placed on an altar. On his name-day, the 20th of January, pilgrimages were made to this chapel, and the pilgrims received consecrated wine from the saint's skull, believing they would be cured from any disease. This is but one example out of many; it was an ancient usage of the church to have the faithful drink out of bowls which formerly were in the possession of saints, and particularly out of their skulls. The same ancient belief in the magical power of bones is seen in the veneration of bodily relics of martyrs and saints. One of the earliest and best known examples is that of Lucilla of Carthage. who habitually kissed a martyr's bone before partaking of the Eucharist.

In Buddhism the worship of relics plays alike a conspicuous role. Particularly the teeth of the Buddha and an excrescence or protuberance of his skull-bone are prominent as objects of adoration among its devotees. The high skull-bone was regarded as one of the characteristic signs of beauty of a Buddha, and a relic of this kind is described as early as the fifth century by the Chinese pilgrim Fa Hien on his visit to the city Hidda in north-western India. It was kept in a shrine covered with gold-leaf and the seven precious jewels, and was jealously guarded by eight prominent men. The king made offerings of flowers and incense to the bone. Such bones were also shown in other temples, e. g., in a temple at Fuchow, China. Hüan Tsang even mentions Buddha's skull as being kept in a temple of India and enclosed in a precious casket; he says it was in shape like a lotusleaf and yellowish-white in color.

Finally, there is a visible survival of the ancient custom still preserved in our language. German kopf ("head") corresponds to English cup (Anglo-Saxon cuppe), both being derived from Latin cuppa ("cup"). In Italian, coppa means a "cup;" but in Provençal, the same word in the form cobs means a "skull." Latin testa refers to a pottery vessel or sherd, as well as to the brain-pan and head. In Provençal, testa signifies a "nut-shell;" in Spanish, testa denotes "head" and "bottom of a barrel." In Sanskrit, kapāla means both a "skull" and a "bowl." This correlation is still extant in many other Indo-European languages.

B. LAUFER.

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XXIV-XXXI.

The Japanese New Year's Festival, Games and Pastimes

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The Japanese prints with which we are most familiar in this country are those known as nishikiye, literally "brocade picture." Generally speaking, they are portraits of actors and famous beauties or land-scapes and nature studies. There are, however, other woodcuts known as surimono, "things printed," whose subjects are characters known in history and folk-lore, household gods, incidents in the daily life of the people and the celebration of certain festivals, particularly that of the New Year. From a careful study of these prints we may become acquainted with many of the most distinctive customs of Japan.

Though produced by the same process as that used for the *nishikiye*, *surimono* may be easily distinguished from the former. In addition to the series of wood blocks used to print the outline and colors of the design, *surimono* are often enriched by the application of metal dusts and embossing. The decorative motive is usually interpreted or accompanied by a poem or series of poems written in the picture. These prints were not made for sale but were exchanged as gifts among poets and artists on certain occasions, such as feasts, birthdays, theatrical or literary meetings, and especially as cards of greeting presented at the opening of the New Year. The *surimono* in the

collection in Field Museum of Natural History were selected primarily with the view of illustrating the customs and mode of living of the people of Japan rather than of assembling together pictures which would be enjoyed for their aesthetic appeal. While these prints are of an artistic nature, they are valuable to an institution of this kind as approaches to the study of the ethnology of Japan. The Museum is in possession of a collection of three hundred and sixty prints which has been divided into four groups, in the first of which the New Year's festival and certain games and pastimes are pictured to a considerable degree. This selection is hung each year in Gunsaulus Hall (Room 30, Second Floor) from January 1st to April 1st, when it is succeeded by another group.

THE NEW YEAR'S FESTIVAL

Of the many festivals enjoyed in Japan, none is attended with more ceremony than that which opens with the New Year and is celebrated with more or less formality for fourteen days. It was customary in the old days to celebrate the New Year at the time when the plum first blossomed and when winter began to soften into spring, somewhere between the middle of January and the middle of February. Since the adoption of the Gregorian calendar, this festival opens on January 1st, and is attended by many of the interesting ceremonies that were practised in former times. On the thirteenth day of the preceding month, a special stew (okotojiru) is made from red beans, potatoes, mushrooms, sliced fish and a root (konnyaku). About this time a cleaning of the house takes place. It is partly ceremonial and partly practical, and is known as "soot-sweeping" (susu-haraki). Servants are presented with gifts of money and a short holiday.

According to the lunar calendar, the New Year's celebration was opened by the ceremony known as onivarai, "demon-driving." This occurred at Setsu bun, the period when winter passed into spring, and to-day it is generally practised at that time and is quite independent of the New Year's festival. some sections of the country, however, it has been moved forward to New Year's eve, December 31st. As may be seen in the first illustration, this ceremony consists of the scattering of parched beans in four directions in the house, crying at the same time, "Out with the devils, in with the good luck," Though sometimes performed by a professional who goes from door to door, this office is generally carried on by the head of the family. The custom may be traced back to ancient days when the demons expelled personified the wintry influences and the diseases attendant on them. It is still customary in some regions to gather up beans equal in number to the age plus one, and wrap them with a coin in a paper which has been previously rubbed over the body, to transfer ill luck. This package is then flung away at a cross-roads, with the idea that thereby ill luck is gotten rid of. Again in other places some of the beans are saved and eaten at the time of the first thunder.

In Fig. 2 other interesting steps in the celebration may be studied. Certain preparations for the demon-expelling ceremony are being made. A woman who stands near a stove is parching the beans in a flat pan. At her feet the box for the beans rests upon a low stand of the form known as *sambo*, that used as the support for all ceremonial arrangements on festive occasions. It is made of cypress wood; in this case it is lacquered red but when holding offerings for the gods, it is left unstained. It will be noticed that there is a charm stuck in at the upper corner of the open

door in this picture. It is composed of a branch of holly on which is impaled the head of a sardine. This charm, which is always placed in the lintel after the demons have been driven out, is said to be repellent to evil influences and the prickly holly has the property of keeping demons from reëntering the house.

Immediately over the woman's head hangs one of the most conspicuous objects associated with the New Year's festival. It is the straw rope (shimenawa) which is stretched before the entrance at the front of the house, to remain during all the days of the celebration, and keep out all evil spirits. Smaller straw ropes are placed over inner doorways and before the household shrine or god-shelf (kamidana). They are also to be seen on the posts of certain bridges, particularly the Gojōbashi in Kyōto. The shimenawa is always made of straw twisted to the left, the pure or fortunate side, with pendant straws at regular intervals but of differing numbers in the order three, five, seven, along the whole length of the strand. Alternating with these pendants are leaves of the fern, urajiro. Since the fern-fronds spring in pairs from the stem, this plant is symbolic of happy married life and increase. The lanciform leaves attached to the straw rope in this picture, are those of a laurel-like shrub called yuzuri. This plant has been adopted as the symbol of a long united family because the old leaves cling to the branch after the young ones have appeared. Other objects with specific meanings are often attached to the rope, the most common being paper cuttings (gohei) which represent the offerings of cloth made to the gods in ancient times. Occasionally tied to the rope are little bundles of charcoal (sumi) which, because of its changeless color, symbolizes changelessness.

The origin of the use of *shimenawa* on New Year's day may be traced back to mythological times

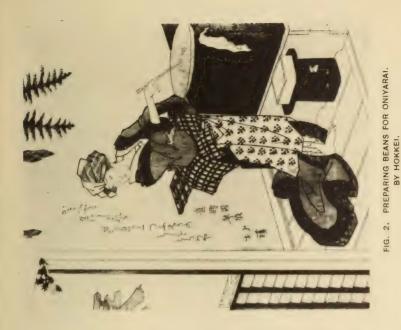




FIG. 1. ONIYARAI CEREMONY.
BY HOKKEI.



when the Sun Goddess, Amaterasu, was tempted forth from the cave into which, through fear of her brother, she had retired. In order to entice her from her hiding place, all the gods assembled together and, bringing with them a dancer, made such a commotion that the "heavenly ancestor of the emperor" peeped out. Her face was reflected in a mirror which they had hung upon a tree. Never before had she gazed upon her own beauty, and thinking it the countenance of a rival, she stepped forth. She was prevented from returning by a fellow deity who stretched a straw rope across the opening of her retreat. During her retirement all the earth had been in darkness. As she emerged, the warm light of the sun spread over the world and joy returned to the people.

A survival of the belief in this legend is to be seen to this day at a certain spot on the shore of Owari Bay. There, at Futami, two tower-like rocks, known at the "Husband and Wife Rocks" (Myōtoseki) jut out of the waves close to the beach. They are joined together by a straw rope which some say represents the bond of conjugal union. Others see in it a hindrance against the entrance of the Plague God. However, these rocks are popularly thought to represent the cave into which the Sun Goddess retired. On this account many people journey to Myōto-seki before dawn on New Year's day, in order to see the first rays of the sun emerge on the horizon between these two rocks, thereby witnessing the re-appearance of the Sun Goddess who is restrained by the shimenawa from re-entering her retreat.

The fern leaves and *yuzuriha*, attached to the straw rope, are also in evidence on certain ceremonial arrangements which are to be seen in all households on New Year's day. Two such objects are illustrated in Fig. 3. They are called *o kazari mono*, "honorably

decorated thing." Both of these stands of sambo form are laid with paper covers on which are placed rice puddings (mochi) of various forms. Those on the stand at the left are large, flat and round, in shape representing the mirror into which Amaterasu looked when she came forth from the cave. Again they symbolize the sun, the yo or male principle, and the moon, the in or female principle. They are adorned with two fern leaves, a folded paper arrangement (called noshi) and a bitter orange (daidai) to which are attached two yuzuri leaves. The Japanese are devoted to puns on words. Daidai-yuzuri, in pronunciation, is identical with the phrase which means "bequeath from generation to generation," hence the adoption of the bitter orange with the yuzuri leaves in the New Year's decoration. Dried chestnut kernels (kachiguri) are often added to the arrangement, for the name suggests the happy thought of victory (kachi). The second stand which holds rice puddings is surmounted by a branch of pine, one of the wellknown emblems of longevity. The pine, bamboo and plum are arranged together for this occasion and are known as sho-chiku-bai. At the base of the pine in Fig. 3 and lying on fern leaves, is a lobster. On account of the bent back and long tentacles it typifies a life so prolonged that the body is bent over and the beard reaches to the waist. A lobster or cravfish is often seen hanging to the center of the straw rope.

In the background of this picture, a set of bows and arrows used for indoor practice may be seen leaning against a basket filled with square rice cakes. In the foreground, a woman is seated before a chopping board on which she cuts the rice cakes into small pieces. Being small and hard, these bits are known as "hail mochi." In some parts of Japan, it is customary

to eat them on the third day of the festival. A companion who holds up a picture of the Sun Goddess, is seated near a lantern, on the base of which rests a waterpot. It is likely that this vessel contains the "young water" (hatsumizu) used for the New Year's tea (fuku cha, "good luck tea"). Custom decrees that this water must be drawn from the well before the sun's rays strike it. An offering of rice is sometimes first thrown into the well. With the tea is served a preserved plum (umeboshi), which, because of its wrinkled skin, suggests the hope of a good old age. In addition, there is always served on this festive day a fish stew known as zoni, and a special spiced brand of wine called toso. In some households the first day is devoted entirely to family devotion. Before the ancestral shrine offerings of tea, mirror dumplings, zoni and toso are placed, and then each living member is served in order of age with the same viands. With the same respect for age, New Year's greetings are spoken first to the shrine, then to grandparents and parents and so on down to the smallest child.

As we leave the house and go outdoors, we see before all portals the "pine of the doorway" (kado matsu)—pine and bamboo saplings bound together and set up at either side of the entrance. The pine on the left has a red trunk and is of the species akamatsu (pinus densiflora); that on the right has a black trunk and is the kuro-matsu (pinus thunbergii). Fancy has attributed to the lighter pine, the feminine sex, while the black pine is thought to represent the masculine. Between these kadomatsu is usually hung the straw rope previously described. The two plants, the pine and bamboo, have no religious significance but are emblematic of longevity and fidelity. Long life and vigor are naturally suggested by

the old and gnarled evergreens; the reason why the bamboo should typify fidelity is less obvious. It is again a case of a similar pronunciation of two Chinese characters: setsu meaning fidelity and setsu denoting the node of the bamboo. A kado-matsu is pictured in the fourth illustration where in the foreground two boys, bound together with a rope are testing their strength. This common pastime for boys is called kubi hiki. A third child, acting as umpire, holds in his hand a kite in the shape of a bird.

The streets during the New Year's festival are veritable playgrounds; stilt walking, rope pulling and jumping, top spinning and ball playing are all indulged in. Kite-flying is perhaps the most conspicuous sport, for kites of many shapes and sizes are sent up by all lads on these days. In Japan kite-flying is not only more picturesque than with us, on account of the use of such fantastic forms as double fans, birds. butterflies, cuttlefish or huge portraits of heroes in brilliant colors and unusual proportions, but it is also apt to be a very exciting sport. Occasionally opponents try to capture an enemy's kite. Competitive kite-flying is accomplished by covering the first ten or twenty feet of the kite string with fish glue or rice paste, and then dipping it into pounded glass or porcelain. On hardening, this portion of the string becomes a series of tiny blades which when crossed with another string at high tension can soon saw away the kite of the adversary. It is also customary to attach a strip of whale bone or a bow of bamboo to the large kites, so that on ascending a loud humming is produced which adds to the excitement of the flight. Only boys and men fly kites in Japan.

The girls, dressed in their best costumes, are picturesque as they play with a hand ball and at battledore and shuttlecock. The balls are made of paper and





FIG. 3. SAMBO AND MOCHI FOR NEW YEAR.

BY I-ITSU GETCHI ROJIN.

FIG. 4. KADO-MATSU, KITE AND ROPE-PULLING. BY HOKKEI.



wadding wound with silk of different colors. The battle boards are of a white wood called kiri and are often elaborate affairs, adorned on one side with the portrait of a hero made of colored silks. The shuttlecock is composed of the seed of the soapberry, to which bright feathers are attached. On a surimono in this exhibition two girls are at play upon a red mat spread beneath the blossoming plum tree. To one of the branches is clinging a nightingale, the bird which heralds the approach of spring. All of the poems on this surimono treat of the New Year and the nightingale's song. One, literally translated, reads. "Spring's first wind melting the snow, let laugh the plum, let cry the nightingale." Another rendered in English is as follows: "Like the comical manner of a bouncing ball, the nightingale's song rolls (like a ball) on the plum branch."

Young maidens carrying flat bamboo baskets make excursions into the country to gather the seven spring grasses (nanakusa). These greens, the water drop-wort, shepherd's purse, radish, celery, deadnettle, turnip and rock-cress, are the components which are needed for the celebration of the first of the five festivals known as Go-sekku. This one occurs on the seventh day of the first month.

While the young people enjoy these pastimes out of doors, within the house the older members of the family indulge in the writing of a New Year's poem or in playing one of the games described in the next section of this leaflet. The writing of poems at this auspicious time is almost universal, indeed, the composing of poetry and the mastery of caligraphy are considered as necessary accomplishments for the cultured person. The most common form of New Year's poem is that known as tanka. It is a poem of five lines, the first and third of which contain five syllables,

the other three seven, and is the poem almost always found on *surimono*. Poems are often inscribed on fans as in Fig. 5, where one young woman meditates over the verse which she has written on a fan. A companion seated at a writing table, is grinding ink with one hand and holding with the other a poem paper (tanzaku). Such long strips are to be seen in many houses awaiting the New Year's inspiration. They are sometimes tinted to a soft shade or ornamented with appropriate New Year's flowers or with silver clouds as in this case. One of the poems accompanying this surimono is worthy of translation: "From the window, lighting the brush for the first writing, the plums' fragrance on the wind is blowing."

On the first day of the year, musicians and dancers proceed from house to house. The musician. wearing a flat straw hat which partially covers her face, charms away birds of ill omen with a few strains played on the samisen. The dancers are either those known as manzai or are those who enact the lion dance, a performance adopted from China. (Costumes used in the lion dance of China may be seen in Case 5, Hall I, ground floor.) With the majority of families much of the day is spent in paying visits to friends, at which times it is customary to present small gifts, usually of trifling value such as conserves, fruit, fish, persimmons, herring roe, bean-curd, towels and similar articles. Presents are either placed on trays in ceremonial form or carefully wrapped in paper or silk and tied with red and white cords.

Accompanying every gift there is always a quivershaped envelope of folded paper called *noshi*, in which is inserted a strip of dried *haliotis* or *awabi*. This odd custom, like so many others, has an interesting significance. The strip of *haliotis* is symbolic of long life and durability of affection, because it is capable of being stretched to great length. The single shell of this mollusk also suggests singleness of affection. In the ancient days when Japan was a nation of fishermen, a piece of dried awabi was indeed a valuable gift. In the present use of the noshi and awabi, some say that the Japanese would recall the primitive days, thereby preserving the virtue of humility. Another conspicuous object which is usually in evidence at New Year's is the small treasure boat (takarabune) sometimes made of straw and symbolizing the coming of the "Seven Gods of Good Luck" Shichifukujin. Pictures of takarabune are placed beneath the pillow with the wish that the New Year's dream may be a fortunate one.

No work is done on the first day of the festival, even the sweeping of the house is omitted, lest some good fortune be scattered to the winds. All stores are closed to regular business. On the second day a pretense is made toward returning to normal life. The musician takes out his instrument, the student looks into his books, the artist gets out his brushes and the merchant distributes his goods from gaily colored handcarts. The storehouse of treasures is opened and enjoyed on this day as well, rarely on the first day for fear good fortune and wealth should flee away. The large mirror dumplings are taken from the ceremonial stands and from before the family shrine on the fourth day, and cut into small pieces known as "teeth-strengtheners." On this day also, the fire brigades of Tōkyō march in procession and perform gymnastic feats. At early dawn on the seventh day the master of the house, who follows the old customs closely, arises and goes to the kitchen where he washes the seven spring herbs (nanakusa) in the first water drawn from the well. He then chops them on a board, moving his knife in time with a certain

incantation concerned with cheating any birds of ill omen which might come to the country. The chopped herbs are boiled in a kind of rice gruel and served with ceremony at the breakfast. On the eleventh day the military men used to offer mirror dumplings before their armor. The long celebration of the festival is finally brought to a close with the burning of the *kado-matsu* and other decorations on the fourteenth or fifteenth day of the first month.

GAMES AND PASTIMES

Several of the most popular games of Japan are represented on surimono and only those games will be mentioned herein. To those who would study the subject exhaustively, S. Culin's "Corean Games" is recommended. With the possible exception of chess (shogi), no game is more widely played than go, which has been erroneously identified with the game gobang. somewhat similar to our game of checkers. Go, a far more difficult contest than that European game, was introduced into Japan from China in the eighth century. For generations it has occupied the attention of the Japanese, there being clubs and schools devoted to the playing of go. It is played on a square, raised wooden board on which nineteen straight lines drawn from one side to the other of the board cross nineteen other lines drawn at right angles, making three hundred and sixty-one crosses on which the men are placed. One hundred and eighty white, and one hundred and eighty-one black stones are used in the playing. These represent respectively day and night; the crosses represent three hundred and sixty degrees of latitude and the central intersection stands for the primordial principle of the universe. The object of the game is to capture the opponent's pawns by enclosing at least three crosses around his stone, and to



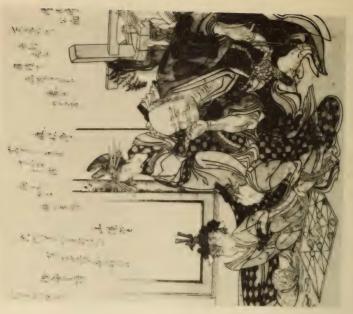




FIG. 5. THREE GIRLS WRITING NEW YEAR'S POEMS. BY KATSUCHIKA HOKUSAI.

FIG. 6. GAME OF JUROKU MUSASHI.
BY HOKUSAI SORI.

cover as much of the table as possible. Military men have always been devotees to the game of go, seeing in it the rudimentary tactics necessary for successful warfare.

Juroku musashi ("sixteen knights") is a favorite New Year's game which is illustrated in Fig. 6. It is played on a board divided into diagonally-cut squares. One player holds sixteen round paper pawns representing sixteen knights; the opponent has but one large piece known as the general (taisho) which has the power to capture enemy pieces when they are immediately on each side of it with a blank space beyond. The holder of the smaller pieces seeks to completely hedge in and thereby capture the big piece.

Sugoroku ("double sixes") is similar to the European "race-game." It is played with dice and the succeeding spaces on the board generally represent the stations of a journey. Brinkley, in his Japan and China (Vol. VI, p. 56), tells us that this game was imported from India in the eighth century and was at first prohibited on account of its gambling character. Eventually the Buddhist priests took it up and converted it into an instrument for inculcating virtue by making the spaces on the board represent a ladder of moral precepts which marked the path to victory. Sugoroku, with the travel board, is commonly played by children at New Year's time. The name is also given to the more difficult game of backgammon which may be studied in one of the surimono in this museum. The board on which the game is being played is now obsolete. It is divided longitudinally into two fields with an intervening space between. Each field has twelve narrow subdivisions in which the men are placed.

Games of cards (karuta from the Spanish carta) are altogether different from the European card

games, though it is commonly supposed, on account of the derivation of this name, that card playing was introduced in the sixteenth century by Portuguese travelers. It is interesting to note here that card playing was known in China in the twelfth century. It would seem that Japan must have made her first contact with the game through a source other than Spain, for the majority of the forms and methods of her playing cards in no way reflect European influence. that cards are quite often called fuda ("ticket") would also add in casting doubt on the European origin. The hana-garuta or "flower cards" which are widely played are small in size, black on the backs and adorned on the face with flowers and emblems belonging to the twelve months. A set comprises fortyeight cards and the values vary from one to twenty points. The game consists in drawing, playing and matching in suits or in groups.

In the game of *uta garuta* ("poem cards"), there are two hundred cards. One hundred of these are decorated with portraits of poets and the first two lines of famous classic verses. These are to be matched with the corresponding hundred on which the remaining lines of the poems are inscribed. Of the many ways of playing *uta garuta*, *chirashi*, "spread out," is the most exciting. The cards bearing the last part of the poems are laid face up on the floor. Those inscribed with the first lines are held by the "reader," who reads them aloud one by one. The other players strive to pick up the corresponding card and he who at the last holds the most is declared winner.

Somewhat similar to uta garuta is the game of kai awase ("shell matching"). Three hundred and sixty bivalve shells are used for this game. The two sides are separated and on the upper half is painted a portrait of a poet, on the mated shell are the lines

of one of his poems. Other sets have only the poems inscribed within them, the two first lines being on one half shell, the remaining lines on the other. The shells are divided among the players, and as the pictures or first lines are laid upon the mats, the holder of the corresponding poem places his shell near it. Some of the old *kai awase* sets were of great beauty and were stored in circular lacquer cases of fine workmanship. This game and the *uta garuta* naturally were played only by the cultured classes and were vehicles for the learning of the classics.

In addition to the kites and battledores, stilts and hand balls, there are represented in this selection of *surimono* other toys for children such as hobby horses, dolls of paper, swinging bats for ball playing, archery outfits and the amusements afforded by caged singing insects and trained mice and monkeys. The older people likewise have delightful pastimes. As the season advances they spend much time in enjoying nature, the viewing of blossoming trees and plants, the listening to singing insects in the evening, and the gathering of shells and shell fish at ebb-tide are all occasions of organized parties in which men as well as women take keen pleasure. A series of five *surimono* by Kuniyoshi realistically portrays the joys of an ebb-tide party.

Most of the musical instruments, which both men and women enjoy playing, are importations from China, particularly the lyre (koto), the violin $(koky\bar{u})$ and the reed organ $(sh\bar{o})$. The samisen, a three-stringed guitar, is the popular accompaniment of the singing girl or geisha; the koto is played by the more aristocratic women. Drums of double conical form (tsuzumi) are to be seen in the hands of both men and women. Flutes have long been popular with men of all classes, the wandering minstrel, the court musician

and even the courtier himself who delighted to match the softness of his flute tone with the gentle light of the moon, or with the voice of the harbinger of spring as evidenced by the poem on Fig. 7 which reads: "Like the nightingale's voice above the clouds, hazed over by the mist, the flute contains sweetness."

Even more aesthetic than the enjoyment of music are the arts of the ceremonial tea (cha no yu, "hotwater-tea") and that of flower arrangement (ikebana), both of which up to a short time ago were thought to be necessary acquirements for the cultivated classes. To each of these sciences many schools were devoted. Only the barest sketch can here be given of these subjects to which volumes have been devoted. The tea-ceremony to-day is rigorously outlined by complicated rules as to utensils, order of procedure and even as to the subjects of conversation indulged in while in the tea room.

Tea drinking was introduced from China in the ninth century and at first was practised by the Buddhist priests for medicinal purposes and especially as a means of keeping awake during meditations. In the fifteenth century meetings for tea drinking were held in groves and gardens. In an adjoining tea house pictures were shown on these occasions which were mainly Buddhistic in subject, and most of them of Chinese origin. Under the great tea-master Rikyū (sixteenth century) the rules of cha no yu were rewritten. From this time on the ceremony was performed in a small house with a low door through which the few guests would have to prostrate themselves for entrance. The most characteristic traits of these gatherings were a close sympathy with nature and a love of simplicity almost amounting to ruggedness as expressed in the tea bowls often partially glazed. Restraint was likewise displayed in the dec-







FIG. 7. NOBLEMAN PLAYING THE FLUTE.
BY GAKUTEL.

orations of the room, a simple bamboo flower holder was preferred to the bronze vase, and a hanging picture (*kakemono*) was chosen which would make an equally quiet appeal, such as a branch in the wind or an example of fine caligraphy. The occasion became a time in which to worship purity and refinement.

Like the tea ceremony, the art of flower arrangement (ikebana) developed into a philosophy under the patronage of the shogun Yoshimasa in the fifteenth century. For several centuries it has been studied and cultivated as a refined accomplishment. Miss Averill in "Japanese Flower Arrangement" tells us that many of Japan's most celebrated generals have been masters of this art, finding that it calmed their minds and made clear their decisions for the field of action. All of the schools of ikebana, with one exception, are founded on the same principles. The underlying idea is to reproduce in the arrangement the effect of growing plants and to preserve for as long a time as possible the life of the plants. Arrangements aim to reflect the season or the occasion. When high winds prevail in March, branches with unusual curves are selected and so placed as to suggest strong breezes. Certain colors are considered unlucky for certain occasions, for example, red suggesting flames is inappropriate for house warmings, when white would be the desirable color in that it suggests water to quench the fire. An uneven number of flowers are considered lucky and also much more suggestive of the processes of nature, where there is seldom found perfect symmetry and actual balance. In the arrangements of the later schools there are always represented three principles known in the different groups by diverse names: "Heaven, Man and Earth;" "Earth, Air and Water;" or "Father, Mother and Child." The three main sprays of an arrangement represent in their directions of growth these three principles, and are designated: "standing, growing, running." Subsidiary branches in the selection are called attributes. As may be seen in Fig. 8, an arrangement is first composed in the hands, care being taken that all branches be kept close together at the base so as to form "the parent stalk". The young man in the picture holds in his mouth a support for bracing the flowers in the bronze vase, on the floor are scissors. A woman is approaching with a waterpot. Such a refined pastime as *ikebana* is primarily intended to entertain visitors who may contemplate the finished arrangement as it is set up in the raised portion (tokonoma) of the main room.

HELEN C. GUNSAULUS

JAPANESE COSTUME

BY

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No 12



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CHICAGO



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LEAFLET

NUMBER 12

Japanese Costume

Though European influence is strongly marked in many of the costumes seen today in the larger seacoast cities of Japan, there is fortunately little change to be noted in the dress of the people of the interior, even the old court costumes are worn at a few formal functions and ceremonies in the palace. From the careful scrutinizing of certain prints, particularly those known as *surimono*, a good idea may be gained of the appearance of all classes of people prior to the introduction of foreign civilization. A special selection of these prints (Series II), chosen with this idea in mind, may be viewed each year in Field Museum in Gunsaulus Hall (Room 30, Second Floor) from April 1st to July 1st at which time it is succeeded by another selection.

Since surimono were cards of greeting exchanged by the more highly educated classes of Japan, many times the figures portrayed are those known through the history and literature of the country, and as such they show forth the costumes worn by historical characters whose lives date back several centuries. Scenes from daily life during the years between 1760 and 1860, that period just preceding the opening up of the country when surimono had their vogue, also decorate these cards and thus depict the garments worn by the great middle class and the military (samurai) class, the majority of whose descendents still cling to the national costume. The peasants at their daily work likewise appear on surimono and furnish an excellent starting

point in this brief study of the dress of the people of Japan.

PEASANT DRESS

The foundation of the costume, indeed in some remote parts of the country the only article of clothing for a man, is the white cotton loin-cloth which is called fundoshi. In addition to this there is usually worn a pair of tight breeches (momohiki) or leggings (kiaken.) Each of these garments is made of cotton material usually dved to an indigo blue. Men and women alike, working in the fields, wear the momohiki and protect their otherwise bare feet with sandals (waraji). These are made of rice straw and tied to the foot by straw laces (sometimes covered with white paper) which issue between the first and second toes, pass through loops at each side of the sandal, cross the foot to loops forming the heel piece and are again brought back to be tied over the instep. Men wear a shield of cotton cloth which covers the chest and abdomen and ties at the back: it is called haragake. Over this is worn a short coat (hanten) which is open in front, generally ungirt at the waist, and made with sleeves narrower than the ordinary over-garment. It is commonly dark blue in color and is often stamped with white patterns on the skirt or with the name or badge of an employer stenciled on the back between the shoulders.

Peasants at work and coolies when traveling are apt to protect the forearms with a tight half-sleeve (udenuki) formed like an ill-fitting mitt with a separate opening for the thumb. They almost invariably tie up their heads with a small cotton towel (tenugui) knotted in the front. (See Fig. 3.) At the same time they may wear a straw hat (kasa) of bamboo or straw plait, in former times domed or conical in shape. Today the flat circular ones are worn not only by coolies

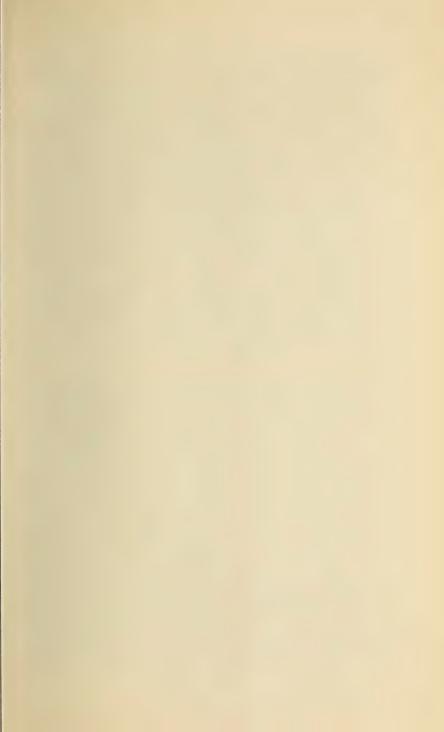






FIG. 1. PEASANT RESTING FOR A SMOKE. BY HOKUSAI.

FIG. 2. PEASANT WITH BUNDLE OF FAGGOTS.

BY KATSUCHIKA TAITO.

but also by men and women when traveling. Kasa formerly had two pads in the crown which rested on the head leaving room for the cue (which is no longer worn) to rise between. The present day hat has a bamboo framework for crown and two tying cords in place of four as in former times.

Another article worn by both peasants and travelers is the rain-cape (mino) of plaited straw or hemp fibre, whose long shaggy ends stand out from the body and effectively throw off the rain. Skirts (koshimino) of the same material are frequently seen on peasants as is the case in Fig. 1 where Hokusai has pictured a fisherman, like himself, resting for a smoke. He holds in his hand his pipe case, and tobacco pouch (tabaco-ire), articles which were universally used in former times and carried at the belt, secured by a toggle (netsuke) which slipped under the narrow sash. His shaven head and tufted cue tell of an age which has passed.

It will be noted that the woman in Fig. 2 has her arms covered with the udenuki described above. Like the man, she is also enjoying her small pipe. recreation has for several generations been indulged in by women in all walks of life. Though many of the peasants while at work wear trousers and straw raincoats, the costume worn by this faggot-gatherer is the more typical dress of a younger woman in the country. Above her waraji may be seen the momohiki and a long petticoat (koshimaki) of muslin (or crepe for the better classes). In this instance it is red. Beneath this garment would be a short petticoat (yumoji), a rectangular cloth wrapped around the loins, and a short chemise (shita-juban), both likely of white cotton material. This underwear when worn by the middle and upper classes is of delicate crepe. The collar (han-yeri) which protects beyond

the outer dress or kimono is attached to the *shita-juban* and is almost always of a richer material than the body of that inner garment. A long shirt reaching to the ankles, and called *naga juban*, is sometimes worn. Peasant women enwrap their heads with a blue cotton towel and usually protect their kimono with an apron (*mayedare*). While working, they tie back their long sleeves with cords (*tasuki*) generally red in color, which pass under the arms, cross in the back and tie on the left side.

ORDINARY DRESS FOR WOMEN

While the peasant woman would wear a single kimono likely of cotton ornamented with a stenciled design, the majority of Japanese women for formal occasions wear two or three kimono, the collars of which project beyond the roll collar of the outer garment. This loose robe, familiar to Europeans as a dressing robe, has quite a different appearance in the land of its origin. Brilliantly colored and gaudily decorated kimono are worn only by singing girls (qeisha) and courtesans ($jor\bar{o}$) and much that has appealed to European taste would be disdained even by these women. Silk material of various weaves and weights is used for the majority of the dress kimono. cotton being employed for every day garments and for the yukata, a kimono worn by both men and women in warm weather within the house or to the bath. Sober striped crepe or inconspicuous all-over designs are preferred for street costume and daily wear. (Figs. 3 and 4.) Heavy crepe similar to canton crepe is the material used for the winter costume for formal occasions. This is entirely or partially lined with white brocade silk, often padded with floss silk to give added warmth. The garment is usually heavily padded around the bottom and thereby gracefully trails on the ground. For summer formal wear, thin weaves of silk, particularly that known as "screen weave," are preferred. On these so-called ceremonial garments the wearer's crest is printed or woven in five places: on sleeves, bust, and back. They are further decorated, though with marked restraint, by embroidered, painted, or woven designs around the lower part of the skirt, and occasionally on the lower edges of the sleeves. Flowers or nature motives appropriate for the seasons are chosen for the garments of varying weights (See Cases 5 and 6 in Room 30, Second Floor). Gray, brown, mauve and soft blues are the shades preferred by the young unmarried women, even more sober shades are worn by matrons. The wedding robe is white as are the garments worn at a funeral by the relatives of the deceased. It is only during the first part of the wedding, however, that white is worn. A bride retires during the customary feast and changes to colored kimono, at least one of which, the furisode, is quite gorgeous in decoration. It is made with very long sleeves which sweep the floor when the bride is seated. Over this is almost always worn a loose coat (uchikake) likewise handsomely embroidered or painted. It also has the extremely long sleeves.

Owing to the simplicity of the pattern, the kimono is very often made in the home. It is composed of straight strips of silk of eighteen inch width, usually sewn together with long stitches to facilitate ripping apart for cleaning or washing. The strips, after washing, are stretched upon boards for drying, thus doing away with necessity of ironing. Cotton garments are often left intact and stretched on a bamboo pole which passes through the arm holes. The bag-like, sweeping sleeves, which are sewed on in a straight seam about twelve inches long, are closed up the front save for the opening for the hand, and left open at the back. They are used as pockets for the paper handkerchiefs

(hanagami) when these are not carried in the silken wallet (hakoseko) which is thrust into the bosom of the robe. The kimono may be worn full length sweeping the floor, or may be folded in a tuck at the waist line which is held in place by a sash of very thin soft silk or by two cords tied about the waist and hips. This robe is always folded left over right except in death, when the reverse arrangement is used.

There is thus left at the neck, where the straight roll-collar crosses, a V-shaped opening. This is softened by the projecting collar (hanyeri) of the undergarment, shita-juban. On this piece of the costume, as on two other parts, a woman may express her fancy for bright or rich decoration. The koshimaki, worn over the yumoji and shita-juban, all previously described, is often made of material of striking design or of scarlet crepe for the younger women. In winter it may be of scarlet wool of fine weave and to-day is often adorned with a pattern brought out by the tied-dye process. Matrons wear white koshimaki.

The sash (obi), however, is the most costly and ornate accessory of a woman's costume. Both married and unmarried women wear obi of rich brocade silks of various colors, often enhanced with metallic threads, The dress sash (maru-obi) is always of stiff material of double width, which is folded lengthwise, the selvedge edges sewed together, thus making both sides of the sash identical. The chuya-obi worn every day is of soft silk or brocade and is faced with a contrasting color, and stiffened within with canvas. When the obi is folded to half width, the edges are worn up, and there is thus formed around the waist a convenient pocket. An obi measures from four to five and a half vards in length and twelve or thirteen inches in width. It is wound about the waist twice thus making a stiff support, and leaving at the back one end which is about

two feet long, and another five feet in length. These are tied in a complicated bow, usually in one of the two following styles. The married women and many maidens wear a flat knot through which the ends are slipped, one slightly projecting at the left side, the other lying flat below the knot. Butterfly bows are worn only by maidens and brides and are sometimes set at an angle or set straight across the back. A pad or bustle (obiage) is often folded within the flat knot to hold it out. This article, as well as the obi itself, is held in place by a silken cord or band (obijime) which passes through the knot and is tied or buckled in front over the obi. In Figs. 3 and 4 the knots of the obi are on the flat order, but, being of a style worn over fifty years ago, the hanging left ends are considerably longer than those of the knots to-day. (See cases referred to above). Since 1780, the courtesan has been required to tie her obi in the front. This style was sometimes adopted also by others but it is generally a simple matter to recognize a woman of this profession by the gorgeous silk of her obi and the other conspicuous marks of her costume.

One may also determine the state of a woman's life by the style of her coiffure. The elaborate arrangements which are seen to-day did not develop until the Tokugawa era (1603-1868). They are generally made by professional hair-dressers about every third day. The hair which is stiffened with oil of camellia is brushed and set and tied in fantastic curves, making, as it were, a black lacquer frame for the delicate face. Married women wear one large puff (marumage) set on the crown of the head, and held in place by a roll of silk which passes through it. The knot of the unmarried women and the bride is a double loop—(shimada) a larger puff in front with a projecting small loop behind, separated by a tightly tied knot

of silk with hanging ends. Servants, young maidens and ladies as well, when on the street wear a butterfly knot (icho-gaeshi), at the front and back of which the underlying silken roll shows. Very few hair ornaments are worn by women of good taste, possibly a comb lacquered gold and embellished with pearl inlay may be stuck into the front lock, which, in all of these coiffures, is separated from the rest of the hair and tied by a black thread. A narrow lacquered pin $(k\bar{o}gai)$ with blunt ends is secured within the single puff and worn only by married women. One or two hairpins may be added at the side. Only the geisha and the joro wear a number of pins, the latter class far exceeding the former in the number of conspicuous ornaments. It was customary in former days for a widow to cut her hair. This style is sometimes seen to-day. At marriage women blackened their teeth and later shaved off their eyebrows.

OUT-DOOR COSTUME

On account of the elaborate style of dressing the hair, women generally go without any head covering with the exception of the *kasa* sometimes used in traveling, and described above, and the *dzukin*, a hood of silk worn in severe weather. This soft covering is fastened within by two loops of string which pass under the ears. The long ends of the hood are folded loosely around the throat.

For added warmth for the body, extra kimono are worn or on informal occasions a short coat (haori) which reaches to the knees. Though giving the effect a short kimono, the haori is, in fact, quite a different garment. The silken strips of which it is made are wider than those used in the kimono, and added girth is also affected by the insertion of side gores. The fronts, in place of crossing over, are single-breasted

and are tied edge to edge by small silken cords inserted under the inner edge of the collar. The sleeves, breast and back of the *haori* are usually blazoned with the wearer's crest.

There are different types of sandals for various occasions and weathers. These are almost invariably worn with the white cotton stocking (tabi), a mittenlike covering reaching well over the ankle and made with separate compartment for the great toe. Tabi are hooked in the back on the inside of the foot. former days they opened in front and were tied within. The soles are of cotton webbing considerably stiffer than the upper portion, thus affording adequate protection as a foot covering within the house where only the stockings are allowed to touch the straw-mats; all shoes are slipped off at the threshold. As in the case of the waraii, all sandals are secured to the foot by two cords which issue between the first and second toes and pass over the sides of the foot to openings on either side of the heel. The flat sandals $(z\bar{o}ri)$ are used for ordinary walking. They are made of rice straw matting, and may or may not have the separate sole of rawhide or of coiled hemp rope or braided rushes. There is sometimes a slight heel of rawhide so folded as to give a spring when the pressure of the foot is released. Other zōri used for more special occasions have the upper sole and cords covered with a silk either plain or embroidered. The sole in this case is of heavy felt. For children, zōri are often covered with cotton cloth of gay colors. Such are the shoes worn in fair weather.

In muddy, rainy and snowy weather, a raised wooden clog or patten (*geta*) is used. These are made of the light *kiri* wood which is either unstained or may be lacquered black. The upper soles are plain or covered with a fine rush-matting. There are three forms of

geta. The less expensive ones are of sandal form made of plain wood, without matting sole, and raised from the ground on two thin cross-blocks separately inserted into the under part of the sole. (Fig. 6.) The second type is also of unstained wood, often with matting sole affixed to the punt-shaped body which is so carved as to leave a thick block-like support at the heel and a sharp edge of equal height below the arch of the foot. The front of the shoe is slopingly cut away to the arch and beneath a tin cap may be seen. which protects the ends of the leather covered cords with which the shoe is held on. The third type (komageta) has the same general outline as the last described save that the whole base appears solid from the outside. It is, however, hollowed out in the center thereby lessening the weight. It is also generally lacquered in black and the inserted cords are often covered with silk, velvet or leather. For very bad weather, tips or caps (tsumagake) of lacquered leather, oil cloth or paper are fastened over the front of the geta and held at the heel by cords. At the present day elastic bands are used to secure the tsumagake. The geta and komageta worn by courtesans are extremely high, and the custom of wearing the sandals without tabi was quite popular for a time among this class of women.

ORDINARY DRESS FOR MEN

It may be seen from a study of the subjects in the third illustration that the costume on the man, the figure in the black *haori*, does not strikingly differ from that worn by the women. It should be remembered that this *surimono* illustrates the modes popular in the early part of the nineteenth century. This young man had reached the age when his hair had been allowed to grow leaving only a small shaven space on the crown of the head, over which the forelock was





FIG. 3. TRAVELLERS AT ENOSHIMA. BY HOKUSAI.

drawn. The cue was spread to a fan-shape strongly resembling the outline of a woman's coiffure. Men of middle age and *samurai* are generally depicted with the forelock shaved, the crown of the head being partly covered by the cue which was stiffened and curved forward. To-day, almost all men wear their hair in European style.

The *haori* worn by men is practically the same as that made for women. The men's kimono is similar to the woman's robe though the collar is longer and the sleeves shorter. Sewn tucks are put in at the waist line when an adjustment is necessary to bring it to ankle length. These would be covered by the sash (*obi*) which encircles the waist two or three times. For formal occasions a stiff striped silk is chosen for the belt (*kaku-obi*). It is about four inches in width and is tied in front or back preferably, in a double knot with the ends turned up. For everyday wear, there is worn a much wider sash (*heko-obi*) made of silk of soft weave which is tied behind in a bow.

Up until 1876, all men of the samurai class wore two swords which were thrust beneath this belt at the left side. The tobacco pouch and the inro (a small ornamental case used for seals and medicines) were carried by many men and secured at the waist by decorated toggles (netsuke). A brush and ink-holder (koshisage or yatate) a purse and a folding fan might also be held by this sash.

In walking, the skirt of the kimono is often tucked up in front under the obi, thereby exposing the momo-hiki usually worn when traveling and described in the early pages of this paper. For general wear, the lower legs are not shielded above the tabi. The under-garments, shirt (juban) and padded jacket $(d\bar{o}gi)$ worn in winter, reach only to the thigh and knee. In extreme weather, extra kimono are added, some are padded

with floss silk or with wool. The under-kimono (shitagi) is occasionally of light color, but the collar (hanyeri) which projects beyond the outer garment as in the case of the woman's costume, is always of black for winter and of white silk for summer wear. In former times, men wore kimono with plaid or all-over designs and even some very striking patterns are pictured in the prints of the early nineteenth century. To-day the kimono is made of silk, hemp, or cotton in a striped pattern of sober colors, and for formal occasions black is the color preferred.

At such times there is worn over the kimono a pair of loose trousers (hakama) open half way down the sides and resembling a divided skirt with six pleats in front and two in the back. The belt line is higher in the back than in the front and is stiffened by a piece of board or thick paper of trapezoidal form to which tying bands are attached. These pass around the waist twice and tie below the obi knot at the back. Hakama are made of dark colored, striped silks rather stiff in texture.

There was formerly worn by the samurai an upper garment made of the same material as that of the hakama; together these pieces were known as kami shimo, "upper and lower". When this combination was in vogue both garments were fashioned from a thin hempen textile, preferably light blue in color with an all-over pattern of fine design in white. The "shoulder-dress" (kata-ginu), as the name suggests, was a sleeveless coat, pleated into a narrow waist and flared out at the shoulders so as to give a wing-like effect. It was adorned with the wearer's crest, woven or printed, on the back and the shoulders. The haori has almost entirely supplanted this ceremonial garment which now rarely appears except in inland towns on formal occasions such as at funerals. Another type

of overcoat, almost obsolete, is the $d\bar{o}buku$, a double-breasted dress formerly worn as a dust-coat by travelers or as an extra kimono by priests and philosophers.

Footwear for men is practically the same as that for women. The *tabi* are blue or black for informal wear and white for dress occasions. In the Genroku period (1688-1703) they were made of brown buckskin and later of silk. Men at that time dressed luxuriously and aped the fashions of women, some of the young dandies even went so far as to blacken their teeth and shave their eyebrows after the manner of married women.

Hats were not generally worn by men save when traveling. As was stated previously, at such times straw hats, *kasa*, were worn as protection against sun and rain. They were of many forms, the most striking resembling an inverted basket which completely covered the head and throat. Such hats, (*fuka-ami-gasa*) were popular with *samurai* who had left the ranks of their feudal lord and who traveled more or less in disguise.

DRESS FOR CHILDREN

Children have always been dressed in gay colors and the designs on their kimono are oftentimes very large and striking. Red is the most popular shade for the young child's *kimono*, which in cut, is practically a miniature edition of the parent's robe. The only differences are the sewn tucks at the shoulders, knees and hips and proportionately long sleeves on the kimono for little girls. Sandals, which are miniature forms of those described above, are worn by children from the time they learn to walk. Not until the age of seven do children wear regular *obi*. Up to that time, a pair of bands (*himo*) hold the kimono together and tie in a bow at the back. A girl's first *obi* is a narrow sash

which resembles that worn by a man, though made of softer silk. At sixteen the tucks at the hips of her kimono are ripped out and adjusted by folding into one large tuck like that on her mother's robe. On this day also she dons for the first time a full-sized *obi*. Little by little the shoulder tucks are released and the long sleeves (*furisode*) shortened, and soon her kimono is that of the full grown woman.

In former times the heads of both boys and girls were shaven at a very early age. When three years old, three patches were left untouched, one on each side and one at the back of the head. A girl's hair to-day is usually allowed to grow naturally though there are many styles of hair cutting for both sexes. In former times at the beginning of his fourth year a boy's hair was merely clipped; the crown alone being shaved and a forelock left. At five a boy of the samurai class was ceremoniously stood upon a go board and invested with his first hakana, a small sword and a miniature dagger. This ceremony is called hakamagi. A. Mitford in an account of certain rites and customs, related in "Tales of Old Japan," vol. II, p. 264, describes a dress which the boy received at this time. It was embroidered with cranes and tortoises, emblems of long life, and with pine and bamboo symbolizing an unchanging virtuous heart and an upright mind. The regular garments worn by a boy assumed a sombre tone early in life in contrast to the girl's dresses which continued to be bright and decorative almost to her sixteenth year. At fourteen the sewn body tucks on a boy's kimono were changed to the inverted pleat on a man's robe, and at fifteen, if a youth gave promise of developing a manly character, the gembuku ceremony was celebrated, his forelock shaved, and from then on he was allowed to wear men's clothes and dress his hair in the style of his father. Through all of their

early youth, children to-day wear a charm-bag (mamoribukuro or kinchaku) made of brocade or damask and containing a charm (mamorifuda) which is said to protect them from all sorts of accidents common to children. A metal ticket (maigofuda) giving the name and address of the child and the zodiacal sign of his birth year, is often worn about a child's neck.

COURT DRESS

The garments heretofore described are those which, for several generations, have been seen on the people of the great middle class and the peasantry. Before 1868, however, there were two courts, the Imperial one at Kyōto and that of the shōgun at Yedo. (now Tōkyō) where costumes were worn which differed distinctly from those seen on the mass of the people. As early as 645 A.D., in adopting many of the customs of China, the emperor established fixed ranks and rules of ceremonial and determined upon styles of costume to be worn at court functions. regulations continued to be observed with only minor changes, by all courtiers for practically twelve centuries. On very rare occasions to-day, such as at the recent marriage and the coronation of the young emperor Takehito, the old court costumes appear. Unfortunately, European dress is worn at most of the court functions. For careful descriptions of the coronation robes of the emperor and empress as well as many other details of court costume which cannot be touched upon in this paper, J. Conder's "History of Japanese Costume" in the Transactions of the Asiatic Society of Japan is recommended. The handbook of the Victoria and Albert Museum, London, written by A. J. Koop and entitled "Guide to Japanese Textiles, Part II. Costume" is an invaluable aid to those studying this subject. In Field Museum in Gunsaulus Hall (Room 30,

Second Floor) there is in Case 9 a set of dolls whose costumes reproduce accurately those robes worn at court by emperor, empress, military court officials, and court musicians. Other court costumes, described later, are pictured on the fifteenth century Tosa Screen on the west wall, and the costumes of feudal lords (daimyō) which were similar to those of the Kyōto nobles of lesser rank, may be studied in the large tapestry on the north wall. Certain early printed Japanese books of costume belonging to the Museum may also be consulted.

COURT COSTUME FOR WOMEN

Prior to 1868, at all formal court functions for many centuries, women wore an elaborate costume made of stiff brocades and silks, called junihitoye "twelve single robes". In reality there were four outer robes in this dress. The outside one (karaginu), as the name suggests, was made of Chinese silk of a bright color and cut as a very short jacket, with straight open front, the sleeves reaching only to the elbow and the skirt extending to a point slightly below the waist line, where it was unconfined. The other three robes may be seen on the court lady in Fig. 5, a surimono by Yanagawa Shigenobu. The karaginu is not there worn. As may be distinguished from the picture, the inner-most of these three robes, though identical in shape with the outer garments was cut larger than the other two so that the long sleeves completely cover the hands, and the collar and the hem project beyond those of the upper dresses. The inner kimono was known as hitoye ginu and measured about nine feet from collar to hem. As in this picture, it was commonly of dark green silk with a lozenge pattern, and lined with a lighter green silk. The middle robe itsutsu-ginu or go ye ("five robes") was, when worn by the empress.

made of embroidered silk damask with five thicknesses at the sleeves and edge of the skirt so as to give the appearance of five robes. As it appears on this court lady, the five layers seen at the lower part of the skirt show it to be made with five folds of silk shading from red, through pink to white. The outside robe (uwagi) of the empress was usually of purple silk or a bright scarlet with gold thread decoration. For ladies of the court there were regulations regarding the patterns and colors of this outer garment which was the smallest but by far the most gorgeous of these three robes. In contrast to the regular kimono these court robes have the sleeves left entirely open in the front. The whole dress is much more voluminous than the ordinary kimono. The fronts of the robes also differ in being cut away at mid-thigh, about seven or eight inches, then continuing on in a diagonal line to the hem.

In addition to the *karaginu*, there was added, on formal occasions, on top of these robes, a ceremonial apron-shaped garment (*mo*), worn in the back as a train. It was about five feet in length with a pattern either painted or embroidered upon the thin white silk of which it was made. It was pleated and sewed on to a broad belt (*ogoshi*) to which were attached three pairs of long narrow bands. One pair, of the same material as the *karaginu*, passed loosely around the waist and tied over the *uwagi* in front. A second pair hung loose at either side, and the third pair, tied together at the ends, passed over the shoulders outside of the *karaginu* and was secured by tucking under the pendant bow made by the tying of the first pair of bands.

It will be noted that the court lady did not confine her robes tightly about her waist by the broad obi of the ordinary costume. The kake-obi worn with the court costume was a narrow band, about five inches

wide, which encircled the waist over the belt of the trousers (hakama or uchibakama) which were worn beneath these kimono like robes, and trailed behind them. Uchibakama were extremely long and full and almost always were made of scarlet silk of stiff texture. They were held up high above the waist by two tying bands whose ends hung at the right side. The feet within, covered with undivided socks and not with the tabi, were slid along the ground in walking. upper part of the body was clothed with one or two short chemise (kosode) of white silk which were tucked into the top of the uchibakama. Two kosode are visible in Fig. 5. With this costume, a lady almost invariably carried a folding fan (akome-ōqi) generally decorated with emblems of longevity and with rosettes of cords tied at each of the end slats.

The coiffures for court ladies were simple in comparison to those which became fashionable in ordinary circles during the Tokugawa shogunate. On formal occasions, when dressed in the junihitoue the empress and ladies of higher ranks wore two hairpins and a metal disk (shashi) with three loops, fastened by a red cord to the front of the hair which was combed straight back over an arched coring of disk shape. The hair was gathered into a long tail, sometimes seven feet in length, which, with the addition of false hair, swept over the trailing robes. It was bound together at the shoulder level with a band of figured silk (yemotoyui). Below that, at intervals, it was tied with white paper. Short locks were allowed to hang at each side of the head and the hair nearest the head was brushed out to form a fringe at regular intervals.

This coiffure was known as *suberashi*. The metal disk and pins were omitted on informal occasions, and the hair was parted in front and spread over the ears. This made a striking setting for the face which was





FIG. 5. COURT LADY ON VERANDA. BY YANAGAWA SHIGENOBU.

ву ноккеі.



painted white with ceruse (oshiroi) and made more unreal by the shaving of the eyebrows and the substitution of two large black spots (taka-mayu) painted on the forehead.

When the formal *junihitoye* was not worn, a similar set of robes (*ko uchigi*) would be substituted. This series was usually less elaborate than the former and consisted of four robes made of alternating green and red materials. They were put on over the trailing hair.

In summer there was worn in place of the *kara-ginu* and *mo*, a long short-sleeved garment (*kagami*) made of thin silk. It was longer in the back than the robes which it covered, and only a little shorter in the front. Light shades such as pink, green or a light red were chosen for it, and it was decorated with large floral designs.

For outdoor wear a lady slipped over her garments, a long robe (*kinu katsugi*) with loose sleeves and wide full neck which was drawn over the head as a hood. In some of the early paintings there is pictured a broad hat like an inverted bowl, sometimes draped on the edge with a curtain-like veil.

Young servants at court did not wear the outer robe or *uwagi*. For them, the *kosode* was cut long, made from red cloth, and held in place by a broad *obi* of green fastened behind much in the style of the ordinary costume. Over this was worn the *uchikake*, the long robe with extremely long sleeves which were closed up the front leaving only a small opening for the hand. As in the case of the wedding *uchikake*, these court over-garments were often elaborately decorated.

Painted robes (ye-ginu) were worn by the ladies in waiting who attended the emperor. These were of white silk, full length and worn loose over a hitoye, kosode and uchibakama.

COURT COSTUME OF MEN

As in civilian life, the costumes of the courtiers in many respects resembled those worn by the women of the court. Young noblemen sometimes shaved their eyebrows and substituted the painted patches on the forehead; they also painted their teeth black and wore their hair done in two circular loops, one on either side of the face which was oftentimes painted like that of a woman. In Fig. 6 a young musician playing a flute is pictured by Hokkei. Being in outdoor attire, his extremely long flowing trousers similar to those worn by court women, are not worn loose and dragging, but are drawn up by a running cord and tied above the ankle. These are known as nubakama. Inside of these would be a pair of plain red trousers (shita bakama) cut from exactly the same pattern but made without the tying cord. The edge was folded neatly around the bottom before the cord of the nubakama was drawn. Often shita bakama were worn alone indoors, when they were allowed to trail on the ground in the same manner as the uchibakama of women. The nubakama in Fig. 6 are white, ribbed, and decorated with a red fence and gate (torii) and pine tops in green. Those in Fig. 7 are violet in shade. The trousers in Fig. 8 are of an entirely different cut and were styled uye no hakama. They were open at the sides and sewed on to a narrow belt which tied at the sides. They were pleated only at the hips, the lower portion being cut like a straight loose trouser and not wide in girth as were the foregoing types. For the higher nobles they were always made of white silk with a checkered ground and medallions of large size, and were lined in red silk. At the center front and back, which were open, two straight loops hung from the belt. Beneath the uve no hakama there was worn an inner pair (akaōkuchi) of plain red silk cut after the pattern of the

above, but open only at the sides and made without the hanging loops.

In these illustrations, all of which are surimono by Hokkei, three types of foot-gear are represented. The geta and zōri, worn with tabi and pictured in Figs. 6 and 7, have already been described. The nobleman in Fig. 8 is wearing shoes called fukagutsu They were made of leather or papier maché and in cut resembled a loose boot. Other shoes called asa-autsu were made either of kiri wood or papier maché lacquered black: sometimes they had leather soles and occasionally they were lined with silk. They had turned up toes and shallow up-turned edges at the heel and, in form, they resembled the shoe worn in the present day in China, the country from which they were originally adopted. With these court shoes were worn undivided socks (shitagusu) of white or colored embroidered silk. The soles were stiffened for use indoors where they were worn without the shoes inside of the trailing shita bakama.

Both men in Figs. 6 and 7 are wearing a curious upper garment known as kariginu. When patternless, it was called hoi. It was especially appropriate for outdoor sports such as hunting and hawking. It was a double-breasted robe with stiffened round collar which fastened with a button and loop at the right shoulder. The fronts were cut shorter than the back. and the sides were left completely open. The sleeves were attached for only a few inches near the armpits. so that in the wearing they slipped off the shoulders and exposed the garment underneath. Long silk cords were run in the edge of the sleeve in alternating long and short stitches, the ends being knotted and pendant. These could be drawn up to make a tight enclosure around the wrist. A narrow belt, of the same material as the robe, confined the kariginu at the waist. The

front was pulled up so as to cover the belt and leave an apron-like effect over the knees. Thin, unlined material was used for the summer *kariginu*, brocade with bold designs and crests form the two pictured herein.

Beneath this garment there was usually worn a short tunic (*kinu*) cut like an abbreviated kimono. Below this would be an unlined, short jacket, *hitoye*. The young nobleman (Fig. 6) seems to be wearing extra *kosode*, shirts of white silk, and his sleeves are cut long like those of a woman's garment.

In Fig. 8 a nobleman of high rank is pictured as he stands near the famous waterfall at Yōrō. The upper garment which he has on was worn by all court nobles from the first to the ninth rank, by princes. and by the emperor himself on certain occasions. The general designation for this class of robes is $h\bar{o}$. $H\bar{o}ueki-h\bar{o}$ describes the robe seen in this picture. It was double-breasted, with round collar secured at the right by a loop and button. The long voluminous sleeves were completely attached, save for a small ventilation opening. The skirt was closed at the sides, and the bottom was finished off with a deep hem which projected at each side in a flap. The ketteki-hō or "open-sided" hō, cut with the back longer than the front, was open at either side of the skirt below the sleeve length, and was not finished off with the projecting hem. It was worn by military court officials. The hōyeki-hō was confined at the waist by an ornamental girdle (hirao) elaborately embroidered in various designs of pines, plum, cranes, bamboo, etc., and with long fringed ends which hung, one in front, the other at the left side. A more common style was the kiri hirao, the girdle of which was threaded through a wide loop with fringe, on which a panel was embroidered in a significant design. This hung at the

front. (Fig. 8.) Partially covering this girdle was a belt of stiff black leather made in two unequal parts with metal ends which were joined together by cords. The longer portion of the belt was covered in the front by the bloused robe; the shorter portion showed at the back and was ornamented with a row of ten placques of lapis-lazuli, jade, agate, or marble as befitted the wearer's rank. Such belts were called *seki-tai* ("stone-belt").

Beneath the hōyeki-hō, a nobleman of the fifth rank or upward wore a short stiff garment (happi), whose primary object was to hold out the $h\bar{o}$. It was an almost sleeveless jacket stiffly starched, with a stand-up collar which crossed in a V at the neck and did not show above the outer garment. Next to this was worn one of the most striking pieces of court costume, the shita-gasane, a short jacket with a train of the same width as the back of the jacket and of a length which varied from four to twelve feet according to the dignity of the wearer. As in this case, the color of the shita-gasane was usually white and the higher nobles had a pattern of medallions woven in the silk. A formal presentation of the chrysanthemum here forms the design of the medallion, and the lining of the shita-gasane is red. The garments worn in cold weather under this combination were known as akome (a short silken jacket without any train) and (ōkatabira), a shirt of plain white hempen material. with sleeves bound in red silk edgings which showed. and collar of white, black and red bands, which projected beyond the collar of the outer robe. In summer, a red garment asetori was worn in place of the ōkatabira.

This full costume described above went by the name of *sokutai*. When wearing it, noblemen always carried upright in the right hand a baton (*shaku*) of

white wood (for the lower ranks), and of ivory for the upper ranks. It was from twelve to sixteen inches long and two or two and three-quarters inches wide. This object, like other pieces of court costume, was a straight adoption from China, where it was used for centuries as a memorandum tablet by the government officials and known by the name Hu (see Hall 24, Case 44, for examples). In place of the shaku there was often carried a folding fan $(hi-\bar{o}gi)$ composed of twenty-five slats of wood which were united at the bases by a metal rivet. The tops were threaded together with silk cords whose ends were tied in decorative knots. In summer the fan would be made with thin ribs covered with paper.

Suspended from the belt, on the right side, would be worn a curious oblong box (*gyo-tai*, "fish-bag") very narrow in width and depth and about five inches long. It was covered with white ray skin and adorned with figures of upright fish in gilt or silver.

The type of sword carried at court was known as tachi, a long, slender curved blade with hilt covered in white ray skin and scabbard ornamented with lacquer or pearl inlay. In contrast to the samurai's two swords which were thrust through the belt, the tachi is a slung sword attached to the girdle by two loops of silk braid. All three noblemen here illustrated have a tachi. In Fig. 7 an attendant carries it reverently behind his master. The young man in Fig. 6 carries two swords, his katana thrust under his obi and his tachi slung at his side. Its scabbard is protected by sheath of fur (shirizayu) made from the skin of a tiger.

One of the most important parts of every court costume was the hat or cap, which was worn not only outdoors, but also within the palace, even in the presence of the emperor. Young noblemen and certain

of the lesser ranks wore a stiff black cap of fantastic form called *eboshi*. As seen in Fig. 6, it fitted over the stiff cue, and stood up at the back, the rounded front alone resting on the head. It was made of paper stiffened with black lacquer and so pressed as to be ridged. It was tied on with silk cords which issued on the outside near the roof-like crown, then threaded through one opening at the front edge, and passed on either side of the head in front of the ears, to be tied in a bow beneath the chin. At the pointed back there was sometimes a cord tied in a bow whose ends stood up. Others of these hats had a triangular piece affixed to the front of the crown around the points of which the tying cords were drawn.

There are various forms of *eboshi* ranging from these angular shapes down to a plain tall cap of bell shape. They were all made of the black stiffened paper with ridges or wrinkles impressed. In early times when they were made of silk, these caps bent forward or turned to either the right or the left as they covered the stiff cue. When the stiff paper supplanted the softer material, many of these accidental outlines were preserved and certain shapes were prescribed for certain ranks of courtiers. Some *eboshi* were tied on with cords which crossed over the rounded top, others apparently were pinned on to the cue and stood out over the back of the head in a most insecure looking fashion as, for instance, the tall *eboshi* on the nobleman in Fig. 7.

As consistent with the rest of his costume, the nobleman in Fig. 8 wears a different type of hat, that known as kammuri. This head covering, worn by nobles of high rank, was a shallow skullcap with an upright, rounded, hollow projection (koji) at the back into which the stiffened cue was slipped. A pin, whose ends extended on either side, passed through the koji

which was ventilated by two long openings at the back, and two small holes at the top of the front cut into the body of the cap. The kammuri was made of lacquered paper covered over with stiff black silk gauze. It was made either with a solid crown (atsubitai) or with a ventilated crown (usu-bitai). It was sometimes further secured to the head by cords which passed around the koji and were tied under the chin; those on the kammuri worn by the majority of nobles were of white paper string, the highest nobles and the emperor had cords of silk with tassels. At the back of the koji there was a small slot into which was fitted a long streamer (yei) of gauze, lacquered stiff on the edges. It was generally black, the one in the illustration is white with small medallions. According to rank, the *yei* were worn in different positions. On occasions of high ceremony, that of the emperor stood upright. Courtiers of the upper ranks wore the vei hanging. Military court officials had this streamer curved into a circular loop, and they wore, at each side of the kammuri, side pieces like semi-circular blinders. made of stiff horsehair, black in color. The nobles of low rank wore in place of the *uei*, two loops of string lacquered and bent to an upright position. The headdresses which the emperor and empress wore at coronation were very elaborate crowns. They are described in detail by Conder.

The costume of priests will not be entered into in this paper. The armor as worn by the generals and soldiers of lesser rank will be considered in another leaflet entitled "The Gods and Heroes of Japan."

HELEN C. GUNSAULUS.



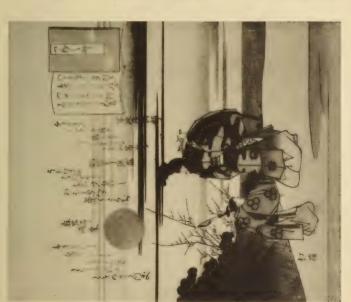


FIG. 7. NOBLEMAN FLUTING BY MOONLIGHT.
BY HOKKEI.

FIG. 8. NOBLEMAN AND ATTENDANT AT YÖRÖ FALLS. BY HOKKEI.



Gods and Heroes of Japan

BY

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CHICAGO, 1924

LEAFLET

NUMBER 13

Gods and Heroes of Japan

Each year from July 1st to October 1st there is on view in Gunsaulus Hall (Room 30, Second Floor), a group of wood-block prints (Series III) which illustrate certain of the gods and heroes of the Japanese people. These prints are of the type known as surimono, cards of greeting made for special occasions and more fully described in Leaflet No. 11. Any limited selection such as this one can claim to be only an introduction to a subject which is almost limitless in its inclusion. In this leaflet mention is made solely of those deities and heroes who appear pictured in this group of prints; acquaintance may be made with many more interesting characters by a study of the decorations on certain sword-mounts installed in Gunsaulus Hall.

Any approach to the study of the deities worshipped or reverenced in Japan must of necessity presuppose some acquaintance with at least three religions which for centuries have made their impression on the hearts and minds of the people of that country. These three systems of faith are Shintoism, Buddhism, and Taoism. Confucianism has had a much more vital influence on Japanese life than has Taoism, but the former religion is essentially a code of ethics in which emphasis is put upon the social and political duties of man rather than upon a personal relationship between himself and any god or gods. There is consequently no Confucian pantheon in the sense that

we have a Shintō or a Buddhist pantheon. A supreme ruler, Shang Ti, is recognized. Confucius himself is reverenced and honored, but not worshipped. The evidences of Confucian influence are apparent not so much in the attitude of the Japanese toward supernatural beings as in their reverent devotion to purely historical personages who on account of bravery, self-sacrifice, and loyalty have become recognized as national heroes. In the later pages of this leaflet, this influence will be illustrated.

One of the extraordinary traits of the Japanese mind lies in the fact that a man may at one and the same time be Shintoist, Buddhist and Confucianist, This, however, is not so strange as it at first appears. for it will be remembered that when Buddhism was introduced into Japan in the sixth century, the early protagonists, anxious to propagate the new religion, "generously" coordinated with the Buddhist pantheon many of the Shinto gods, thereby stilling in the minds of the doubtful any scruples which they might have had about deserting the deities of their ancestors. Buddhism not only accomplished the fusion of Shinto deities into the Buddhist pantheon, but also taught of a way of salvation, a hope and doctrine undeveloped in the Shinto religion whose main teaching was honor for the gods and obedience to the emperor. Confucianism in turn offered rules for daily living. Thus each of these three systems of faith emphasized a different principle. As an illustration of the comparative harmony in which three religions may dwell, Hokusai has left a surimono full of meaning and beauty. It hangs on the south wall of the room, and its most striking note is a large, rugged maple-tree beneath which three travellers are seated. From the fallen leaves they have kindled a fire over which they have heated a pot of wine (sake). These three men are conceded to be Buddha, Confucius.

and Lao-tse tasting the wine of life. One of these philosophers finds it sweet, one sour, and the third finds it bitter, thus showing that the same principle—the meaning and value of life—may be interpreted in various and contrasting ways.

SHINTO DEITIES

Unlike Buddhism, Confucianism and Taoism, which were imported from India and China, Shinto is the native religion of Japan; that is to say, it was evolved out of a combination of the nature myths of the earliest inhabitants, together with the emperor-worship which was brought to the islands by the conquering Yamato race in the early Christian era. Shintō is the Chinese term for Kami no Michi which means "the way of the gods." Kami means that which is above, and therefore is a term applied to the nature deities, the emperors and certain other human deities who together make up the Shinto pantheon. The doctrine, if such it may be called, is outlined in the book called the Kojiki ("Record of Ancient Matters"), written in the year A.D. 712, and in the Nihongi ("Chronicles of Japan"), A.D. 720. The Kojiki has been styled "the Bible of Shinto." The first section opens with an account of the creation in which Japan is made the centre of the world—the "spontaneously congealed island," which was formed by the drops falling from the spear of Izanagi and Izanami as they stood upon the floating bridge of heaven. These gods descended to the island and there became the creator and creatrix of all the spirits which abound in nature.

The supreme deity of the Shintō pantheon is the Sun-Goddess, Amaterasu, who sprang into being from the eye of her father Izanagi. She is acknowledged as the heavenly ancestor of all the emperors of Japan, for it was her "August Grand-child" who descended to

earth to rule over the "Central Land of Reed Plains" and whose descendant was the first emperor. Jimmu. Rarely are any of the deities who preceded Amaterasu depicted either in painting or in sculpture. Even the story of the Sun-Goddess is much more often recalled by the presence of certain symbols which represent her rather than by likenesses of the deity herself. The most dramatic incident in her career was her flight from her mischievous brother, Susano-wo, the god of the sea, who later went to dwell in the nether-land. He was a jealous and impetuous fellow who continually tormented his sister. One day while busy weaving the garments of the gods, he crept to the roof of the weaving hall and let down among the maidens the reeking hide of a piebald horse. So great was the terror of the Sun-Goddess, that she fled to a cave and closed herself in, thereby robbing the land of all sunlight and causing eternal night to prevail. Thereupon "the eight hundred myriad deities" assembled together to entice the Sun-Goddess from the cave. The cocks were brought to crow, suggesting to the goddess that day had dawned even without the rising sun. A mirror was forged from the "Heavenly Metal Mountains;" jewels and offerings of cloth were hung upon the sacred sakaki tree, and a dancer, by name Uzume, danced before the door of the "Heavenly Rock Dwelling," much to the amusement of the gods. Hearing the commotion and laughter without, the Sun-Goddess opened the rock door to see what could be pleasing the deities from whom she had withdrawn her presence. On inquiry she was told that there was among them one more illustrious even than she. At this moment the mirror was pushed forward, and Amaterasu, astonished at the glory of the reflected face, came forth from the cave to gaze upon it. Hastily a straw rope was drawn across the entrance of the cav-





FIG. 2. THE SEVEN GODS OF GOOD FORTUNE. BY HOKUSAI.

FIG. 1. UZUME DANCING BEFORE THE CAVE.
BY HOKKEI.

ern. and she was thus prevented from returning; daylight was again restored to the earth. The straw rope (*shimenawa*) is seen on New Year's day. A description of its form and usage is given in Leaflet 11.

Three interesting prints by Hokkei are hanging upon the north wall and illustrate this story. In the first, a drummer may be seen beating upon a large drum. In the second, two white fowl stand by the side of one of the gods, Saruto Hiko no Mikoto, he who dwelt at the eight crossroads of heaven. According to the early records, this god had a nose seven hands in length and a back whose length was more than seven fathoms. He emitted a refulgence which reached upwards to the Plain of Heaven and downwards to the "Central Land of Reed-Plains." He it was who later met the descending "August Grand-Child" as he journeved from heaven to the earthly country. None of the gods dared to face Saruto Hiko no Mikoto and subdue him, save the brazen dancer Uzume who literally stared him out of countenance and so humbled him that he offered himself as a vanguard for the celestial visitor. Uzume herself is pictured in the third print, reproduced here (Fig. 1). She holds the bellrattle with which she accomplished her dance before the cave of the Sun-Goddess. Resting against her shoulder is the gohei, a staff adorned with paper cuttings which represent offerings of cloth or rather mulberry-bark fibre used in ancient times for clothing. Gohei are common to-day in Japan in Shintō worship. In the background of this print hangs the eight-pointed mirror in which the Sun-Goddess saw her radiant reflection. Tradition tells us that it was given by Amaterasu to her grandchild with the admonition that he take it to earth and regard it as if it were her august spirit. The mirror is one of the three imperial treasures of Japan and is guarded in the temple at Ise, where it is worshipped from afar, being kept covered by a series of silken wrappings and enclosed in a covered shrine surrounded by many fences.

The "August Grandchild" married and had several children, one of whom, "His Augustness Fire-Subside." descended to the Palace of the Sea Deity. There he married the daughter of the Ocean Possessor, who was named Toyo-tama-hime. She and her father are both pictured in this series of prints; she, attended by an old dragon as she comes to draw water from the well; he, clothed in gorgeous robes with the dragon's head surmounting his flowing red hair. The story runs that just prior to the birth of her child, Toyo-tamahime, begged "His Augustness Fire-Subside" not to look upon her, whereupon, according to one account, she turned into a crocodile; according to another, a dragon. Her request was not obeyed, and on account of her shame at having been seen in her true form, she left the shore whither she had come and returned to the palace under the sea. The child who was born was left in the care of a younger sister of the Sea Princess. and he became the father of Jimmu Tenno, the first human sovereign of Japan.

It has been pointed out by W. G. Aston in "Shintō" (p. 115), that several features of this story betray recent origin and foreign influence, such as the palace in the sea-depths and the Dragon-king, which are Chinese. He adds, "The comparatively modern character of this important link in the genealogy which traces back the descent of the Mikados to the Sun-Goddess confirms the view that the so-called ancestor-worship of the ancient Japanese is a later accretion upon what was in its origin a worship of the powers of nature."

There were many reasons for the coordinating of the nature myths and the emperor-worship into a carefully outlined theory. These legends and traditions were retold with a purpose, and that purpose was the theoretical establishment of the imperial regime. Times were by no means peaceful prior to the seventh century. Tribes were struggling for supremacy, and it was necessary for the emperor to assure his power. By A.D. 712 when the Kojiki was committed to writing. Buddhism was rapidly absorbing many of the native gods, and kami were losing their identity as they came to be regarded as incarnations of Buddha. One has only to recall that the personality of the Sun-Goddess, the supreme deity of Shinto, was in danger of being completely submerged as she was becoming identified with the Buddhist Dai-Nichi or Amida.

In the early ninth century there peacefully emerged out of this conflict of the two religions, Shinto and Buddhism, a mixed doctrine known as Rvobu-Shintō ("Twofold Way of the Gods"). In it Kobō Daishi, a priest, attempted the reconciliation between the ancient traditions of the divine ancestors and the teachings of the Indian cult. Through this process of amalgamation, for hundreds of years, Shinto was very nearly swallowed up within Buddhism. Rvobu-Buddhism is a much more correct term for this admixture. For several centuries the emperor himself was a devoted adherent to the Indian religion; many of the rulers retired into monasteries and became Buddhist monks. Much of the merging of Shinto in Buddhism was accomplished through the medium of art. Shinto knew next to nothing of artistic representation. Buddhism came into Japan in the form of gorgeous temples, noble sculptures and glorious paintings which depicted a pantheon varied enough to coincide with the many ideas that had been formulated concerning

most of the native deities. Those Shintō gods who were not individually coördinated with Buddhist deities were catalogued under the general term of "Gongen" or temporary manifestations of Buddha. This designation was applied to deified forces of nature and to certain national heroes in the ensuing centuries. The shōgun Tokugawa Iyeyasu is quite as often called by the name Gongen Sama. Emperors were known as Tennō ("Heavenly King") or Ten shi, ("Son of Heaven"), names which were retained for the supreme ruler, even after the revival of pure Shintō and the downfall of Ryōbu-Buddhism in the last century.

THE SEVEN GODS OF GOOD FORTUNE

As W. E. Griffis tells us in his "Religions of Japan" (p. 216), "Ryōbu Buddhism is Japanese Buddhism with a vengeance. Take for example, the little group of divinities known as the Seven Gods of Good Fortune which forms a popular appendage to Japanese Buddhism and which are a direct and logical growth of the work done by Kobō as shown in his Ryōbu system." These popular deities, known by the name Shichifukujin, are nominally a Buddhist assemblage, but, in truth, they come from four distinct sources: Shintoism, Buddhism, Brahmanism, and Taoism. They are in evidence in almost every Japanese home, certain of them appearing on the "god-shelf." They may be studied in a group, as they are pictured celebrating the New Year together in Fig. 2.

At the left of the picture is seated Benten or Benzai Ten, the only female deity of the company. She is usually identified with Sarasvati, goddess of eloquence and learning, the wife and female energy of Brahma. She is again said to be Miyo-on-ten-niyo, Goddess of the Beautiful Voice, who may be either

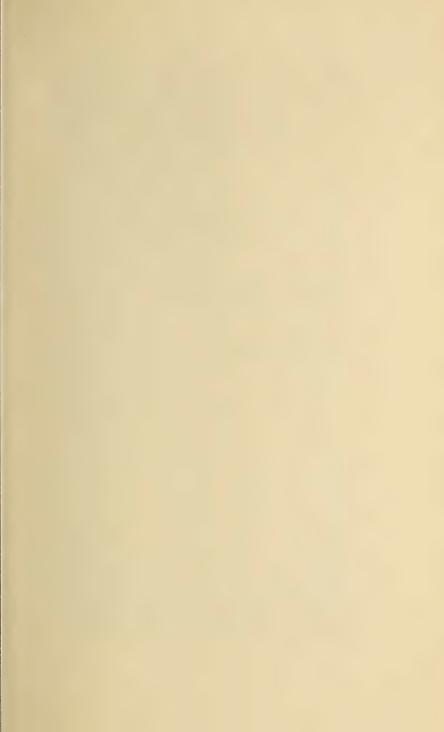




FIG. 3. FUDO RESCUING ENDO MORITO.
BY KUNISADA.

Japanese in origin, or an adaptation of one of the musicians of the god Indra. Again Benten is occasionally identified with a Shintō deity, Ukemochi no Kami, protector of food. In this print we are told by one of the poems that a visit is to be made to the deity Ukemochi no Kami. In the background, in the raised recess, there is a covered stand surmounted by a coiled white snake having the head of an old man. This peculiar form of serpent is often pictured on the crown of Benten; therefore one must suppose that the artist, Hokusai, had identified the two deities, Benten and Ukemochi no Kami, as one and the same. In Buddhist paintings Benten usually wears as a crown a Shintō gate or torii beneath which the white snake is coiled. The torii is visible here in front of the high coiffure. The rest of her appearance does not tally with the usual Buddhist conception wherein she is depicted either with the sword and gem, or with eight arms holding various symbols. In secular representations she is generally pictured in flowing robes, wearing a small tiara, and holding a stringed instrument. Such a conception is given us in a print by Hokkei in the Museum collection.

Ebisu, the patron of fishermen, is seated next to Benten in the picture under study. He is arranging a huge fish for suspension, likely as a present to the shrine. He is generally identified with the Shintō god, Hiruko, though certain scholars label this association as erroneous, and say that his origin is unknown. Hiruko was the leech-child of Izanagi and Izanami, a being so weak that at three years of age he was yet unable to stand, and was therefore abandoned and set adrift in a reed boat. Ebisu is usually pictured as vigorous and happy, dressed in Japanese costume and generally carrying a fish or a fishing rod.

The most popular of the Seven Gods of Fortune is the god of wealth, Daikoku, who stands in the centre

of this group. He is holding a ceremonial arrangement of rice puddings, rice being one of the symbols of wealth. The jewel, the key to the store-house, and the bag of treasures are also associated with him. Another of his attributes is the magic hammer whose blows create riches. This object is to be found in the other representations of him which are on view, especially prominent on top of the rice bale which the reclining god holds upon his upstretched feet in an amusing print by Hokusai. The rat, though a devourer of rice, is usually associated with the god of wealth. This is because the "day of the rat" in the Japanese calendar is sacred to Daikoku. The rodent is usually of the white variety as in a print by Keisai, where it is being petted by a young woman who sits next to Daikoku as he counts up his riches on the abacus. In all the representations of this happy deity it will be noted that the lobes of his ears are extremely large. This is a mark of divinity given also to others of the Shichifukujin. Daikoku is said to be the Japanese adaptation of the Brahmanic deity Mahākāla, the black-faced god placed before the gates of Buddhist temples. Unlike that stern, dignified deity, who is the protector of the realm. Daikoku is represented as a sturdy, smiling figure dressed in ancient Chinese costume. The only resemblance between these two gods is that each is sometimes portrayed with a blackened face. The name "Daikoku," as written, means the "Great Black One." There is, however, another combination of Chinese characters which can be read either "Dai Koku" or "O Kuni" and which mean "Great Realm." These characters are those used for writing the name of the Shinto god of land, known as O Kuninushi no Kami. On this insecure platform, the Buddhist Dai Koku ("Great Black One") has been identified with the Shinto O Kuni nushi no Kami ("God of

the Great Realm"). This instance serves as an illustration of the blending of religions in Japan. It is also a concrete example of the fact that when Buddhism came to China it had absorbed much of the Brahmanic pantheon and came on into Japan twofold, so to speak, and equipped to absorb within itself many of the native deities of that land.

Another of the Seven Gods of Good Fortune, who came in the train of Buddhism into Japan, is Bishamon Ten or Tamon Ten, who is seen in the background of the picture (Fig. 2). Though of martial guise and called the patron of the warrior, he is not primarily a military deity, but is regarded as another god of wealth. He wears a helmet and cuirass, and is generally equipped with a long spear which he holds in his left hand. In his right, he usually bears a pagoda. In this representation he is placing the pagoda before the shrine of Benten or Ukemochi no Kami. The Seven Gods are not regarded with the awe and dignity that one would think appropriate for deities. They are very often treated in a humorous manner, and commonly Bishamon is pictured as making love to the goddess Benten. Undoubtedly that idea is herein suggested, as we see the dignified deity placing his pagoda at the foot of the shrine whereon Benten's white snake is coiled. In Buddhism, Bishamon or Tamon Ten is known as Vaiçravana, one of the four kings of Heaven, who guard the four sides of the mountain Sumeru, the axis of the universe. He is also identified with Kubera, the Brahmanic god of Wealth, who was converted by Buddha and henceforth known as Vaicramana.

The three of the Seven Gods who remain to be mentioned are all adoptions from China. They are seated at the right of the picture, and are delightedly fixing a ceremonial arrangement for the shrine. The two bearded figures are Jurojin, wearing the black cap, and Fukurokuju, an old man with an extremely high forehead. Both of these deities are Taoist in origin, and their identities seem hopelessly mixed. Each of them is said to represent the founder of the Taoist doctrine, Lao-tse. Both are symbolical of longevity, and both have the same attributes—the tortoise, the crane, and the deer. Jurojin usually carries a staff, which here lies on the floor beside him. To it is generally attached a scroll. A Chinese legend makes of him the spirit of the Southern Star of Longevity.

Fukurokuju whose name means "wealth, prosperity and long life" is considered the god of wisdom on account of his remarkably shaped head. His figure is that of a dwarf. He is depicted as a more genial deity than Jurojin, and is often to be seen heartily laughing, or gaily travelling through the sky on the back of a flying crane. Popular legends have also associated him with the South Pole Star.

The jolliest god of the group is Hotei, the friend of children and a deity who is greatly beloved by the populace. His extremely fat figure is only partially covered with a flowing robe, his head is shaven, and he usually carries a flat fan of Chinese form. He is possessed of many treasures to attract his admirers, and these are encompassed in a huge bag which hangs over his shoulder or upon which he sleeps. "Hotei" means "cloth bag," which in Chinese reads "Pu Tai," the name by which this deity is known. Pu-Tai Ho-Shang ("Cloth Bag Priest") was a Chinese monk who is said to have lived in the tenth century. He received his name from the sack which he carried, in which he was wont to poke all sorts of eatables collected on his journeys. In China his smiling image is to be seen in the Buddhist temples, where he acts as a guardian. In certain connections he has been identified with

Maitreya, the coming Buddha, an erroneous association which has been explained by the legend that he is thought to have referred to himself when he once said that Maitreya had a hundred myriad forms and appeared to people who knew nothing of it.

FUDŌ AND HIS ATTENDANTS

The imposing figure of Fudo, as seen in Fig. 3, furnishes a marked contrast to the informal and familiar treatment given to the Seven Gods of Good Fortune, whose images commonly appear in the household of Japan. This Buddhist deity is generally to be seen only in temples portrayed in a dignified statue or in some rare painting. The name of Fudō means the "Immovable One." According to the teachings of one sect of Buddhism, he is a manifestation of Buddha in his more formidable and indignant moods. He holds a sword and rope which are symbolic of readiness to menace and restrain all evil-doers. He is surrounded by a halo of flames which typify wisdom. Though today recognized as a guardian deity of Buddhism, he has been identified both with the Brahmanic Civa and again with the Hindu god, Indra. He is usually pictured as appearing above a waterfall which is indicated in this print by Kunisada by vertical lines of blue and silver. At the great temple of Fudo in Narita, the cold water ordeal is indulged in by devotees of this god. At Meguro there is a smaller temple to Fudo, where a meritorious penance consists in standing for several hours in cold weather beneath a waterfall in the temple-yard, thereby washing away all taint of sin. Such a performance is illustrated in this picture. Fudō is generally accompanied by two attendants, one of peaceful feminine aspect, the other a severe looking masculine figure. Each has his own attribute. The gentle figure, who goes by the name of Kongara, bears

a lotus, and is said to embody the sustaining power of The other figure, usually colored a strong red. carries a large club, and typifies the subjugating power of the "Immovable One." The qualities of kindliness and forgiveness have been attributed to this deity who at first glance has such a terrifying exterior. story runs that he and his attendants came to the rescue of a penitent who had become frozen after standing for three days beneath a certain waterfall. This penitent was none other than the warrior Endo Morito. who is pictured in Fig. 3. This twelfth-century hero had fallen in love with Kesa, the wife of Watanabe Wataru, and was determined that he would wed her. Loyal to her husband she resisted his suit, whereupon Endo Morito vowed that he would slav her family, if she did not allow him to enter the house at night and kill the husband while he slept. Kesa agreed to this alternative, but secretly set about making a plan to save Watanabe Wataru. One night, her husband being away, she made an appointment with Endo to come to her house. Slipping into the silent room, Endo hastily severed the head from the reclining body and soon discovered, to his horror, that he had killed the pure and loyal Kesa herself as she lay disguised in her husband's clothes. In repentence and grief Endo became a priest, and sought to expiate his sins by standing beneath the waterfall, counting his rosary and holding in his teeth the Buddhist bell with thunderbolt handle.

SOME NATIONAL HEROES

Loyalty such as Kesa evinced for her husband, loyalty of a retainer for his feudal lord, loyalty of a daughter who makes the supreme sacrifice in order to relieve the distress of a poverty-stricken parent, all such exhibitions of self-effacement from a sense of duty

and devotion, have long been held up in Japan as ideals of moral attainment. Much of this reverence for loyalty can be traced to the influence of Confucius, whose teachings may be summed up in the doctrine called the "Five Relations"; sovereign and minister, father and son, husband and wife, elder brother and younger brother, and friends. From the sixteenth century on, there was a decided difference between Confucianism in Japan and Confucianism in China. Whereas in China the basis of the Confucian system was filial piety, in Japan the loyalty as expressed between sovereign and minister, lord and retainer, master and servant, became the corner-stone of personal righteousness. To be sure, filial piety was strongly developed in Japan. Even to-day sons and daughters are brought up to recognize the "Twenty-four Paragons of Filial Virtue," who are Chinese children whose sacrifices for their parents form some of the most touching accounts of human relationships. Four of the Twenty-four Paragons are pictured in prints by Hokkei.

The extreme loyalty between retainer and lord was due to the elaborate system of feudalism which was evolved in Japan from the twelfth century on up to the middle of the nineteenth century. For four hundred years the feudal lords and their retainers, who made up a very large part of the population, had been engrossed in wars civil and foreign. In this time there had developed an exaltation of bravery and self-sacrifice in battle which practically amounted to a religion. This philosophy went by the name of Bushidō ("the way of the warrior"). Whereas Confucianism had taught peace, Bushidō glorified war, but beneath both of these philosophies ran the same refreshing stream—the principle of loyalty. To follow one's lord

in death by committing suicide was a common practice for a loyal retainer. Self-abnegation was developed to such a degree that warriors frequently took their own lives in order to bring into public notice their disapproval of a civic situation, or to call attention to the fact that they had been thwarted in a public duty. Stories of brave warriors were constantly told to the rising generations, and many historical characters became exalted into national heroes, paintings and statues of whom are to-day reverenced with a devout admiration.

There very often appears in Japan a group of three Chinese heroes who have been adopted by the Japanese as examples of loyalty between friends, and models of national integrity. These men who lived in the second century and who plighted their allegiance to one another in a peach orchard, are represented in several surimono in the Museum, hanging in a series on the north wall. One of the heroes is always depicted with a flowing black beard; this is Kwan-yu, deified as the God of War in China, where he goes by name of Kwan-ti. His two companions are Gentoku (Liu Pei) and Chōhi (Chang Fei). The former is usually drawn with a gentle countenance consistent with the stories of filial sacrifice which are told of him in early youth. Though he had a humble beginning, he rose to note in his lifelong warfare against the usurper Ts'ao Ts'ao. Finally he proclaimed himself emperor of China, and with the assistance of his loyal companions held great power up until his death. Chōhi rose from the trade of a butcher and wine-seller to be a leader in the wars of the Three Kingdoms. He was a very clever tactician, several times saving his soldiers and himself by a misleading ruse. He is pictured with fan-like beard, flowing hair, and generally carries a straight double-edged spear.



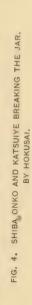




FIG. 5. KOREAN ENVOY BOWING BEFORE KATO KIYOMASA.

BY SHUNTEI.



An interesting group of surimono by Hokusai hangs at the west end of Gunsaulus Hall. In these prints the artist has made a comparison between some of the heroes of China and Japan. One of them pictures the two patriots, Hanrei (Fan Li) and Kojima Takanori. Both of these men were loyal supporters of their emperors, each of whom had come into disfavor. In the print referred to, both heroes hold brushes and inkwells in their hands, preparatory to writing messages to their respective sovereigns. The story runs, that when the Japanese emperor, Go Daigo, was going into exile, Kojima Takanori, remembering the lovalty of the Chinese Hanrei for his emperor Kosen, wrote a message upon the trunk of a cherry-tree past which he knew his beloved sovereign would be led by his captors. It read, "O Heaven, do not destroy Kosen while Hanrei lives." In this veiled message Go Daigo recognized the devoted hand of Kojima, and it is said that he went into exile greatly sustained by this pledge of fealty. Another of these prints by Hokusai (Fig. 4) tells the stories of a Chinese boy, Se-ma Kwang, known in Japan as Shiba Onko, and of the Japanese general, Shibata Katsuive. The boy, who is cited as an unusual example of quick-wittedness, one day, in company with several others, was looking into a deep jar wherein some goldfish were swimming. One companion, losing his balance, fell into the jar and was about to drown. All the children ran away in terror except Shiba Onko, who took up a rock, broke the vessel, and allowed the water to escape. The story of Shibata Katsuiye also centers around the breaking of a jar. This famous sixteenth-century general while being besieged in the castle of Chokoji was unable to obtain any fresh water for his soldiers to drink. Thinking to stimulate their courage, he led them into a hall, where there stood a jar of water kept for emergency. After giving them each a satisfying drink, he, without taking any himself, took his spear and broke the jar and let the water escape. A sortie was immediately made, and he and his men emerged victorious.

In passing, it is of interest to study the armor typical of the Japanese warrior. It consists of several separate pieces: the helmet: mask: gorget: cuirass with appended hip-pieces, four or more in number; sleeves of mail; shoulder-guards; thigh-guards; greaves and boots of metal or of leather. The body of the suit itself is made of metal or leather laminae or of bands simulating laminae laced together with brightly colored silk braid. The breast plates are often of embossed metal or painted leather. The helmets are sometimes surmounted with crests and flaring wings as in the case of that worn by the fully armed warrior in Fig. 5. Here we see Kato Kiyomasa, seated upon a tiger skin, and holding the folding fan with the red sun-disk upon it, an instrument used by generals in signaling commands. At his left is his long, forked spear; over his shoulder may be seen his brace of arrows; projecting behind him is his fighting sword (katana) which is thrust through his belt along with the short sword (wakizashi) whose hilt is visible in front. His crest (a circle with the centre cut out) appears on his red trousers, on his sleeves, and on his helmet. Fixed in a brace in the immediate foreground of the picture is a standard (umajirushi), a banner formerly carried by the commander of an army.

Kato Kiyomasa lived in the sixteenth century and led the expedition against Korea. He directed the campaign with such ferocity that the Koreans gave him the name "devil warrior." His fierce expression in this portrait by Shuntei seems to have completely subdued the Korean envoy who is prostrated before him.

Among the other national heroes who are represented in the prints may be recognized the following:

Kaneko, a woman of great strength is pictured holding a runaway horse by the simple process of standing with her foot upon the halter of the rearing animal. This same character is often depicted with a struggling enemy whose arm she has tightly grasped beneath one of her own arms. At the same time, she successfully carries upon her head a bowl filled to the brim.

Tomoye Gozen is another heroine renowned for her strength, as well as for her devotion to her lord, Kiso Yoshinaka, whom she followed into battle, fighting at his side. One enemy she struggled with and escaped from, leaving only her sleeve in his hand. A second opponent she beheaded, and a third, who attacked her with a pine-tree in lieu of a war club, found himself outclassed in strength, as the heroine twisted the tree trunk and broke it into splinters.

Asahina Saburo was the son of Tomoye Gozen and inherited her undaunted bravery and excelling vigor. He is sometimes shown swimming with a live carp under each arm or hurling large rocks at his enemies. In one picture in this series, the big hero is playing with a child who celebrates the New Year with his new toy, a wagon in the form of the treasure ship (takarabune), the magic vehicle of the Seven Gods of Good Fortune. In the other print, Asahina is seen in his trial of strength with Gorō Tokimune, the elder of the Soga brothers, who sought to enter the banquet hall and save his younger brother Jurō Sukenari who was in danger. The Soga brothers lived in the early thirteenth century, and are respected as loyal sons who avenged the murder of their father. They are sometimes pictured as children kneeling on the beach.

where they escaped being beheaded through the intervention of Hatakeyama Shigetada. At the ages of twenty and eighteen, these brothers made their way through a furious storm to the tent of their father's murderer, Suketsune, and there in the night they accomplished the deed for which they both gladly gave their lives.

Two twelfth-century heroes are Kagekigo and Kunitoshi who are pictured by Hokkei. They are dressed in full armor, and are seen fighting on the seashore at the battle of Yashima, which occurred in 1185. Kagekiyo, renowned for his power and vigor, is pulling off the neck-piece of the armor of Minamoto Miyo no Yashiro Kunitoshi. Kagekiyo was later exiled by the Minamoto, and his closing days form the touching theme of a famous drama.

Legends of fantastic forms have been woven about several historical characters. So many tales have been told about Benkei, a warrior of the twelfth century, said to have been eight feet tall, that one doubts if this fascinating fellow ever existed and was. as he is reputed to have been, the retainer of the great hero, Minamoto no Yoshitsune. Benkei, on account of his boisterous ways, was also known by the name of Oniwaka ("Young Demon"). When a youth, he proved his strength by overcoming a huge fish in a waterfall. This incident is told in a print by Hokkei. Though said to have been a wandering priest, he is pictured as stealing the bell from the temple of Mildera and as fighting with all the travelers who crossed Gojō bridge, conquering nine hundred and ninety-nine of them, being beaten only by Yoshitsune whose loyal henchman he became.

It is said that Yoshitsune's skill at fencing was due to his having been trained by the forest sprites (tengu), some of whom are pictured in Fig. 6. These



FIG. 6. WATANABE FINDING KINTOKI IN THE WOODS. BY HOKKEI.



beings with bird-like bodies often have faces of longnosed men. They are said to haunt the forests and the mountains, where they dwell with their ruler Kurama Yama no Sojobo, a tengu with long beard and moustaches. In this print by Hokkei they are flying in front of a waterfall which splashes down from a high cliff. Above, at the right, stands the hero, Watanabe no Tsuna, who may be recognized by his crest, three dots over the digit one. To him many famous deeds are attributed. He was the loyal retainer of Minamoto no Yorimitsu, popularly called Raikō, a tenth-century hero, who is said to have slain hosts of demons and goblins. Raikō and Watanabe pursued to death the Shutendoji, the Goblin King, a fearfully wicked giant whom they drugged and slaughtered while he dined in his mighty palace hall. The story is recalled in a print by Hokkei, where the full-armed Raikō is startled by the falling of a kite whereon the head of the goblin is pictured. Sometime after the slaving of the Shutendoii. Raikō and Watanabe met a new foe in the shape of a goblin spider. Both heroes were enveloped in thick, white webs which almost suffocated them, but in time they cut their way through and tracked the beast to a cave and there slew him. Thinking that all the malevolent creatures were killed. Watanabe disbelieved the statement that a demon appeared nightly at Rashomon gate in Kyoto. Sticking up a challenge on the gate post one rainy night, the hero took his place and awaited the enemy. He soon dozed off, but was suddenly awakened by a tug at his helmet. He hastily drew his sword, and slashing it in the dark, struck something which uttered a violent shriek and hurried away leaving behind a huge arm. This, Watanabe took, secreting it in a box and refusing to let any one see it. One day an old woman came, and claiming to be the hero's nurse, prayed to see what he kept in the strong box. At first he hesitated.

but persuaded by her constant entreaties, he opened the casket only to see the old woman turn into a witch, seize the severed arm and fly out of sight.

In Fig. 6 we see Watanabe standing amazed at the strength of the young boy Kintarō or Kintoki. The legend runs that this boy of golden color was found in the woods by the forest nurse. Yamauba, who is pictured at the foot of the waterfall. His playmates were the hare, the monkey, and the deer. The other animals of the forest, particularly the bear and the wild boar, he overcame when but a small lad. Very early in life he evinced his enormous strength by pushing over a huge pine-tree which he wished to use as a bridge for transporting his companions over a rushing stream. It was during this performance that Watanabe happened on the scene. He was so impressed by the youth's power, that he begged the boy to join his ranks and follow him in his efforts against the goblins and demons. Kintoki was overjoved, and thereupon left his mountain home and accomplished much in ridding the country of evil influences.

A few other characters must be mentioned as great favorites, two especially whose stories are woven into famous theatrical performances, known as Nō plays. One is the poor fisherman Hakuryo who has the fortune of seeing the angel of the moon on the pine-clad shore of Mio no Matsubara. Hokusai has left a long surimono in which this story is eloquently told. The fisherman is seen as he finds a feather robe hanging in a tree. Thinking to take it home as a treasure, he is interrupted by the appearance of a beautiful maiden who claims it as her own. Assured that this creature is a fairy, he is all the more anxious to retain the magic garment and refuses to give it up to her until she tells him that she can never return to her heavenly palace without it. Hakuryo is touched by her beauty

and her appeal, and finally agrees to let her have it if she will dance for him. The fairy then takes the robe and performs many dances, and at length her feet miss the ground, and she floats flutteringly upward until she is lost to view.

The old man and woman portrayed in a print by Hokkei are known as the aged couple of Takasago. Around their story has been woven a drama of great beauty and popularity. It is also of interest to recognize them as they appear on the occasion of a wedding. placed on a ceremonial stand beneath a miniature pinetree, associated with a crane and tortoise, emblems of longevity. These aged people are said to be spirits of the great pine at Takasago on Ōsaka Bay. The old tree, though springing from a single root, has a bifurcated trunk which has been adopted as an auspicious emblem of a happy wedded life of long duration. The story goes that the fisherman's daughter, Matsuo, was one day seated beneath her favorite pine-tree near the shore, when there was washed up on the beach the partially drowned figure of a youth named Teovo. This adventurous lad had watched from the opposite shore of Sumivoshi the flight of a heron, and had endeavored to follow the bird by swimming across to Takasago. Matsuo soon resuscitated the youth and laid him on a bed of pine needles which she had raked up. In a few weeks the young couple were wedded and lived for many years beneath the pine-tree, where even now their spirits are said to return on moonlight nights.

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Japanese Temples and Houses

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Japanese Temples and Houses

A general idea of the architecture of Japan may be gained from the study of a group of small prints called *surimono*, which hang in Gunsaulus Hall each year from October to January. The majority of prints in this exhibition (Series IV) illustrates the exteriors and interiors of dwellings in country and city; some of the *surimono* picture inns and tea-houses, and a few furnish glimpses of temples and shrines.

In the very early days of Japanese history, prior to the introduction of Buddhism in the sixth century, houses and temples were built after a common plan; the word miya was used to designate both the Shintō shrine and the palace of the ruler. According to Sir Ernest Satow, the dwellings of the earliest Japanese sovereigns were modest structures, wooden huts of rectangular form, with pillars planted firmly in the ground, and with a floor very close to the earth.

Possibly the floor originally was of mud with a raised wooden portion built only around the sides of the hut, and used for the sleeping quarters. The whole framework of the hut, consisting of posts, beams, rafters, door-posts, and window-frames, was tied together with cords made of twisted fibrous stems of climbing plants. The rafters projected beyond the ridge-pole and crossed each other, thereby ornamenting both ends of the roof which was heavily thatched. Two logs were laid along the ridge-pole and rested in the forks formed by the crossed rafters. In order to hold these logs in place, short logs at equal distances

were fastened at right angles to the ridge by twisted ropes which passed through the thatch and thus secured the roof together. At each end of the gable there was likely an opening through which the smoke was allowed to escape. This feature is still a conspicuous mark in almost every house; one very rarely sees a chimney in Japan. The walls and doors were at first made of rough matting and later of planking. The outlines of these early buildings were all straight; curves were not introduced until the Nara period (A.D. 712-784). All of the building materials were vegetable; tiles and metal trimmings were not employed until after the introduction of Buddhism.

Shintō worship, being primarily a nature cult, was doubtless originally celebrated out-of-doors. The first shrines were derived from the primeval hut and from an early time were built with an elevation, raised some feet above the ground, surrounded by a balcony and reached by a simple staircase. Both houses and temples were encompassed by fences. The architecture of pure Shintō may be studied to-day at Ise, where the main temple buildings are torn down and reproduced exactly every twenty years, thereby preserving the ancient form of shrine. Though there are a few touches indicative of continental influence, such as metal ornamentation, these buildings are excellent examples of early types of construction.

Prior to the introduction of Buddhism, Shintō shrines were always made of unstained cryptomeria wood; roofs were thatched, or covered with strips of bark or shingles. Within the yard there was always to be seen a gate-like structure known as torii ("bird rest") made of two upright trunks on the tops of which rested a long straight beam whose ends projected slightly. Beneath this was another horizontal beam whose ends did not project. In early days the







FIG. 1. TEMPLE OF BENTEN AT SUSAKI.

torii was always made of unpainted wood. It stood near the temple, and is thought to have been originally used as a perch for fowls which were offered to the temple, not as food, but as announcers of the break of day.

After the ninth century when Buddhism gained in influence and practically swallowed much of the Shinto religion, many of the primitive features of Shinto architecture were transformed into a new beauty. Torii were then made of stone, copper, or of wood lacquered red, and many lost their angular outline by the substitution of a curved beam on the top in place of the straight beam of pure Shinto form. Henceforward they were placed in the front of a temple and served as entrance gateways. In a surimono by Hokkei (Fig. 1) we may study the temple of Benten at Susaki, built in the late seventeenth century. In the foreground of the picture is the torii standing just outside the fence which has a roofed gateway for an entrance. In earlier days these gateways were thatched; some of the latter type may be seen in other prints in this exhibit. The Buddhists also changed the severe outline of certain Shintō torii, by adding to the crossbeams framed tablets ornamented with inscriptions. During the revival of Shinto in the nineteenth century, most of these Buddhist accretions were removed. One may be seen on the torii at Ushigozen shrine, pictured in a print by Hokkei.

It was customary for devotees and petitioners to erect *torii* before the entrance to a temple in honor of the deity who was worshipped therein. The number of such gifts was unlimited; in many places long vistas were formed by rows and rows of these votive offerings. In a long *surimono*, Hokusai has depicted the picturesque approach to the temple of Inari, to whom many *torii* have been dedicated. In certain of

the prints a number of stone lanterns will be noticed; these were also a form of votive offering. Many of them stand outside temples to-day; some are of considerable age, others are recent gifts from devoted followers.

Buddhism was brought to Japan from China by way of Korea, and was first introduced in A.D. 552. In the wake of the new faith, artists, sculptors, and architects came to the country, bringing with them the culture and arts of the continent, where Chinese civilization had reached a very high mark. Only the bare outlines of Buddhist temples are given in these small prints. The shrine to Benten at Susaki (Fig. 1) is one of the more modest of these edifices. particular temple, though built in the late seventeenth century, will serve to illustrate some of the distinguishing characteristics of Buddhist architecture. It will be noted that the temple is set upon a rock foundation and that the lines of the roof are curved. The walls of the early temples were constructed of latticework filled in with plastered clay; the floors were at first of tile, later of wood; and the roofs were covered over with tiles which were generally ornamented on the ends. Pillars with brackets supported the curved roof. At first, they were of simple construction, and were decorated with cloudforms; later, the brackets became very complicated in form. In the first few centuries after Buddhism was introduced, everything in the temple architecture was constructional, and ornament was applied only to constructional details. From the eleventh century on, decoration came to be applied more and more.

The period between the twelfth and fourteenth centuries is characterized by gorgeous decoration on the inside of temples and palaces. By this time, the dwellings of rulers had, through the influence of

Chinese palace architecture, become very costly and elaborate structures. The famous Silver and Golden Pavilions at Kyōto, of which only the latter is standing, must have been glories of splendor in the days of their pristine beauty. The Golden Pavilion is square, of three stories in height, and the roofs have the gentle sweeping curve of many of the temple roofs. The whole structure of the second story was covered with gold leaf, and the first story was profusely ornamented with paintings, some of which still remain.

The thirteenth and fourteenth centuries saw the beginnings of feudal architecture, and by the sixteenth and seventeenth centuries great strongholds belonging to the feudal lords were to be found in all parts of the country, particularly near Yedo (Tōkyō), which was the capital of the shōgun. These castles, of which a few remain, were usually square, of two or more stories, and built on steep stone foundations. Barracks, in which the retainers lived, surrounded the central castle. The walls of the lord's dwelling were covered with plaster or with tiles, windows were heavily barred, and roofs were usually tiled. The ends of the roof ridge were capped with copper terminals in the shape of carp or dragons, or with large tiles on which the owner's crest was blazoned.

In the seventeenth and eighteenth centuries, life became very luxurious among the military classes in Japan. Ornament was lavished upon everything connected with home and temple. During this period the temples at Nikkō, shrines to the Tokugawa shoguns, were built. One has only to glance at the tapestry hanging on the north wall in Gunsaulus Hall to appreciate the complicated structure, of these shrines which illustrate the extreme degree to which temple architecture had developed in the seventeenth century. There one may see the graceful sweeping curves of

the tiled roofs, the elaborate use of gold and red lacquer in the gateways and cloisters, the complicated bracketing of the supports, the intricate openwork designs chiselled in gateways and in the friezes of the temples, and the carvings and paintings which adorn the horizontal beams, the eaves and ceilings. This temple, built under Buddhist influence, is a far cry from the simple Shintō shrine of pure unstained wood, with thatched roof. In order to appreciate the more compelling beauty of the early Buddhist structures one should study the series of plates published by the Shimbi Shōin of Tōkyō, under the title "Japanese Temples and Their Art Treasures." This book may be found in the Museum Library.

While temple architecture was developing new characteristics, the common style of dwelling was also passing through various changes. It is important to note, however, that very little of the Chinese influence is registered in the houses of the middle class. Through all the centuries their dwellings were made of wood, as were the Japanese temples. Stone was only occasionally employed for the feudal mansions. Storehouses, called *kura*, are sometimes of stone, but usually are frame structures made strong and fireproof by an extremely thick coating of plaster. These buildings generally stand quite detached from the dwellings to which they belong.

To-day, in many houses in the larger cities, there are evidences of European civilization, such as electric light, plumbing, heating, and so forth. While adding to the comfort of living, these appliances in almost every case are found to be inharmonious with the simplicity and charm of the purely native dwelling. The descriptions which follow apply to houses seen to-day in the interior, and deal with dwellings pictured in this collection of prints, all of which antedate 1860.





FIG. 4. WOMAN STEPPING INTO COURTYARD OF HOUSE.

BY HOKKEI.

FIG. 3. WATER-FRONT AT SHINEGAWA.

BY HIROSHIGE.

The Japanese house gives the impression of being a flimsy, insecure structure, for it practically consists of several wooden beams, upright and horizontal, one or two wooden walls, and three or more sliding walls, which are covered with paper and which may be set up or removed at pleasure. Many houses have thatched roofs; the majority of city houses have roofs which are tiled. Through the recent disaster of the earthquake and fire in September, 1923, the outside world has been brought to realize that the Japanese people have had to evolve a house structure which will best respond to violent disturbance. They, therefore, build their houses of light materials and place the supporting beams on hollowed-out rocks which have been driven into the ground. Thereon the house may be free to sway with the earthquake tremors and not offer the violent resistance which would result from a structure built on a fixed stone foundation. While the roof of tile is one precaution against fire, the inevitable companion of earthquake, it is often the cause of much damage, through its great weight, at the time of violent disturbance when buildings sway, fall, and are shattered. In case of fire alone, tiles may be quickly removed from the roofs of adjoining buildings, board ceilings may be hastily packed up, and screen partitions, mats, and furniture carried off, thereby leaving only the skeleton framework as food for the flames.

It may be recalled that the early Japanese hut had its upright beams driven into the ground. These wooden supports undoubtedly rotted and crumbled within a few years after setting up. The stones on which the house beams of to-day rest serve not only as sockets in which the supports may oscillate, but also are protective shields against the damp surrounding earth. The typical house is of one story, built of unpainted wood, and is of the simple construction

outlined above—upright beams which run from the ground to the transverse beams and inclines of the roof. Whereas the beams and roof of the early hut were tied together with ropes of vegetable fibre, the framing of to-day's house is secured either by short strips which are let in to appropriate notches in the upright, or by longer strips of wood which pass through mortises in the uprights, and are firmly keyed or pinned in place. A Japanese house is a marvel of joinery and presents a rigid unit against lateral and diagonal shocks of earthquake and a solid resistance against the strains of lifting winds.

The small inn at Kanazawa pictured by Hokkei (Fig. 2) is built on the general plan of a private dwelling. The house is elevated about a foot and a half above the ground and reached by a simple step, in this case constructed out of stone blocks; other prints in this exhibition show steps made of wood or of stones in their natural form. It will be noted that the space beneath the building is open, unprotected from the winds which would sweep beneath it. Larger houses and inns, such as the row of two-storied buildings at Shinegawa (Fig. 3), have this space boarded up or latticed. This additional framework helps to secure the uprights.

Across the front of most of the houses, and partly surrounding them, is a veranda which is protected by overhanging eaves and which serves as the threshold to the living-room in the majority of dwellings. Here all sandals or clogs are slipped off and left before entering the house. At night and in stormy weather, heavy wooden sliding doors called *amado* are slipped into grooves which run along the edge of the veranda. These protect the passage and also shelter from the rain the $sh\bar{o}ji$ or movable walls which enclose at least two sides of the dwelling.

Shōii are semi-transparent, sliding screens made of a light framework entirely or partially covered with thin paper through which the light and sun filters. In cool bright weather, they serve as the outside walls. when the amado are removed and stored in a closet for the day. In summer, shōji are often entirely removed, and a large part of the house is thrown open to the fresh air and sunshine. Since much of the necessary lighting comes from the large shōji, windows are not essentially practical in their form, but are often purely ornamental. All sorts of shapes have been used for these openings called mado. Their enclosures likewise run in grooves, are paper-covered, and called shōji. Many charming designs for windows may be studied in Edward S. Morse's book "Japanese Homes." a work of extreme value both on account of its detailed subject-matter and its numerous illustrations.

While the street front of a house may be plain and sombre, the back, where the best rooms are located, is usually made beautiful and inviting by a garden which is often a miniature landscape with evergreens, small brook, foot-bridge, rocks of picturesque forms, and a stone lantern. Many of these garden accompaniments are pictured in these small prints; several stone lanterns of different shapes may be singled out.

Fences are also of interesting and odd forms; three rather common ones are here illustrated, one is of bamboo, another of brushwood, and a third of reeds or rushes bound together in bundles. (See bamboo and brushwood fence in Department of Botany, Hall 27.) A peculiar form of fence, pictured several times, is that known as "sleeve-fence" (sodegaki). This is usually four or five feet long, strictly ornamental and always built out from the side of the house or from a permanent wall. It often serves as a screen for concealing the entrance to the toilet-room

which is built at one end of the veranda. Nearby in the garden will be found the $ch\bar{o}dzu$ -bachi, a receptacle used for holding water to pour over and wash the hands. There are many attractive types of $ch\bar{o}dzu$ -bachi, some are of bronze, others are made of stone or of pottery. The simpler form is a wooden bucket and a dipper suspended from the eaves by a bamboo stick. The one in Fig. 7, at the right of the picture, is a tall cylinder of stone with a depression in the top; a small dipper is resting upon it.

For many centuries the Japanese have been devoted to the drinking of tea. In many of the older gardens there are small tea-rooms, buildings quite distinct from the popular rustic summer-house wherein these nature-loving people like to retire to admire a pleasing view or listen to the singing insects at dusk.

The tea-room became a very important adjunct to the Japanese house in the fifteenth century when teadrinking developed into an elaborate ceremony with certain rules of procedure rigidly outlined. The ceremony goes by the name of cha-no-yu. Tea drinking was at first enjoyed only by the priests, and was especially practised by followers of the Zen sect of Buddhism, who spent much of their time in the quiet contemplation of nature. The priests undoubtedly held their early meetings in the temple groves. The keynote of the tea-ceremony has always been the love of nature and simplicity. When the custom was generally adopted, tea-rooms were built adjoining the private dwellings. They were of a severe style, with rough plaster walls, plain white paper on the shoji, and with woodwork generally left in its natural rugged state. The entrance was made low, so that it was necessary for one entering to prostrate himself and crawl in on his hands and knees in the attitude of humility. Within, the plan was similar to the guestroom of the house, which will be described in the following pages.

The street entrance to a house is pictured in another surimono by Hokkei (Fig. 4). At the right is a shed-like structure used for storing household supplies such as bales of rice. A servant holding a paper lantern stoops in front of two women and adjusts the shoes as they step down from the veranda. At the extreme right, one may see two little jars of bottle-form standing on a shelf. This is the kamidana or "god-shelf," whereon is placed a miniature shrine of unstained cypress wood, of Shinto form, containing written charms and wooden tablets bearing the names of different Shinto deities. Before the shrine there is usually placed a small pottery lamp with a wick floating in rape-seed oil, a pair of vases containing sprays of the sacred sakaki (Cleruera japonica), and two bottle-shaped jars holding wine for the gods. ancestral tablets are worshipped in another room of the house, or are placed in the miniature Buddhist shrine which is of more elaborate form.

In the centre of the picture (Fig. 4) one may see a hanging curtain slashed into three panels and decorated along the bottom with a swastika border. Such curtains are often used at shop entrances or at kitchen doors or to screen closet-like recesses within the house. In pictures of noblemen's dwellings there are often to be seen hanging curtains suspended from a lacquered stand that consists of a square base supporting two upright rods upon which is fashioned a long transverse bar. On the west wall Keisai has pictured such a curtain in a courtier's home.

As one enters a house, he notices many forms of screens used as protections and as partitions. When

the outside walls are removed in warm weather, bamboo curtains, many of them with delicate designs traced upon them, are hung up just within the lintel of the room, affording shade and free passage of air. It is customary to place across the space opposite the entrance, a standing screen of one leaf, usually of wood, with a solid frame supported by two transverse feet. These single-leafed screens are called tsui-tate. Three appear in this selection of pictures; two are ornamented with pictorial designs, the other (at right in Fig. 5) is decorated with caligraphy. Screens of two panels known as furosaki byōbu ("screen to protect the fire-vessel") are low affairs sometimes folding and sometimes in the rigid form of two wooden panels set at right angles. Large folding screens (byobu) are of two, four, or six panels, and are often of great value. especially when covered with paintings by one of the great masters. Some of the rarest of these screens come in pairs, the designs of which are complementary one to the other. A folding screen ornamented by an unknown artist of the Tosa school is installed in Gunsaulus Hall.

Most of the partitions in a Japanese house are movable, and are in the form of sliding screens which run in grooves above and below. The upper grooves are set in the lintel or beam which is at a height of six feet from the floor and which runs the full length of the room. There is naturally a space left between this beam and the ceiling; it is either closed by a plastered partition or filled in with two or more ornamental panels of woodwork known as ramma. Upon these fields many beautiful designs are carved in openwork or in low relief, or one may see examples of light trellis-work done in bamboo filling in this open space.

The partition screens are called *fusuma* and, unlike the outside movable walls or *shōji* whose slight

framework is covered with paper which is translucent, these screens are covered on both sides with thick paper, and give the appearance of solid walls. In less pretentious houses they are undecorated, except by an ornamental quality of paper. In other dwellings and especially in homes belonging to the nobility, these sliding panels bear upon them paintings of extreme beauty and value. Some of them represent a long panorama which stretches across the whole length of the room.

When light is required in an inner room, a $sh\bar{o}ji$ panel is often substituted for the central fusuma panel. In summer, light reed screens sometimes replace the fusuma. These are known as yoshido from the name of a slender rush (yoshi) of which they are made. Through this close grating the air and some light may enter. Partitions of yoshido are set up in a room pictured in a long surimono by Hokusai. On one side of the screens a dancer performs in a room lighted by candles, on the other side, half-hidden from view, one may distinguish the audience and the musicians. Partitions are often entirely removed, thereby throwing all rooms together into one large hall.

The size of a Japanese room is never reckoned in feet, but rather by the number of mats, for all floor spaces, bounded by the grooves for the sliding partitions, are covered over with heavy mats (tatami) of a uniform size, three by six feet. These are made of several thicknesses of straw, matted and sewed together with string, and bound on the edges with a strip of black cloth. When laid on the floor, they are so placed that the corners of four mats never come together; the corners of two mats abut against a third. The common sizes for rooms are six and eight mats. All rooms are rectangular with the exception of the guestroom, in which there is an alcove with two bays. One

of these is a clear recess with a slightly raised floor; it is called the *tokonoma*. The other consists of a small closet with sliding doors usually built in connection with a shelf of two levels, which is known as "different shelf" (*chigaidana*). The *tokonoma* is clearly visible in Fig. 5, at the back on the right side. Within it stands a bronze vase holding a flower-arrangement. On the wall at the back is a hanging picture (*kakemono*) decorated with writing; fine caligraphy is as much admired in Japan as is skillful painting.

The word tokonoma literally means "bed-place." Some authorities trace the origin of this raised recess to the ancient raised sleeping place, others describe it as the place of honor awaiting the not impossible visit of the emperor. Some, particularly Captain Brinkley, tell us that the tokonoma was an adoption from the Zen monasteries, wherein the tea-ceremony mentioned above was first practised. In the monastery alcoves, there might have been hung a sacred picture; or there probably stood a Buddhist statue which served to abstract the thought of the monk, as he sat before it in contemplation. The house tokonoma to-day serves as the platform, whereon is placed a rare treasure of art. Only one object and one painting or series of paintings are shown at a time; and these latter are changed with the seasons. The rest of the household treasures are kept either in the closet connected with the chigaidana, or in the fireproof storehouse built near the dwelling.

Restraint and simplicity are notable features throughout the Japanese house. All of the woodwork is left unstained, the grains, the colors, and natural textures are greatly admired. What we might consider blemishes, such as knots and twists, are marks of beauty to Japanese. Particular care is evidenced in choosing the wood for the post (toko-bashira)



FIG. 6. MAN WRITING NEAR OPEN WINDOW. BY GAKUTEL.



FIG. 5. SCENE IN GUEST-ROOM WITH TOKONOMA.

BY GAKUTE!.



which heads the partition between the *tokonoma* and the *chigaidana*. In Fig. 5 a rough bark-covered pillar may be seen in the centre of the picture, immediately behind the central figure. Several characteristic forms of *toko-bashira* are on exhibition in the Department of Botany in Hall 27. The gnarled and rugged trunks which are there displayed are among the most desirable types.

There is a marked lack of furniture. No chairs are seen, since it is the custom of the country to sit on the floor on one's heels. Cushions and mats are sometimes used as seats. There is no such thing as a bedstead, for the Japanese also sleep on the floor, lying on and under thick guilted comforters called futon. No sheets are used, and it is a simple matter to fold up the futon and store them away in a cupboard and relieve the room of any appearance of a sleeping chamber. Pillows are of various forms. Before the reformation in 1868, when many men wore their hair long and arranged in a stiff, elaborate fashion, they, as well as women, when sleeping supported their necks upon the wooden pillow of box-form (makura), which is capped by a cushion covered over with a folded sheet of crepe paper. Occasionally one finds in these wooden pillow-bases a small drawer wherein a folding lantern, matches, or toilet articles could be stored. Some pillows used in former times were of porcelain. To-day the majority of men rest with their heads upon a small hard pillow of bolster form. A surimono by Kuniyasu, hanging on the west wall, pictures a bed made of several futon with the pillows of box-form lacquered black.

Low tables are used as writing-desks, and are of various styles. Plain, unstained wood, red and gold lacquer, and wood with pearl inlay are all represented as materials employed in the construction of writingtables pictured in these prints. In Fig. 6 a poet sits within the writing space near an open $sh\bar{o}ji$, which half discloses a garden at the back of the house. On the low table are some books and an ink-stone upon which the cake of ink is rubbed after being slightly moistened. The man holds in one hand a writing-brush; in the other, a long strip of decorated paper called tanzaku, a form used for the inditing of short poems.

There is usually no distinct dining-room in a Japanese house. Food is brought into the guest-room on individual tables or trays which are set down on the floor before the guests. It may be unnecessary to mention the charming bowls and cups of porcelain and lacquer in which the food is served; however, a close scrutiny of these prints reveals a variety of dishes which are worth studying.

Flower-pots of diverse forms and sizes are also well represented in this collection. Many of them are of blue and white porcelain (Fig. 7); others are of pottery glazed in soft shades of blue, gray, or brown, and some are of bronze with ornamentation embossed or inlaid. Every home, however modest, has a potted plant on the window-sill, porch, or floor, and its flowerarrangement in the tokonoma. Like a knowledge of the tea-ceremony, the art of flower-arrangement is thought to be a necessary accomplishment for the cultured person. Flowers are very carefully placed so as to represent the three entities of heaven, man, and earth. They are never crowded haphazard into a container, but are studied and grouped so as to give the effect of a growing plant. Tubes of bamboo and rough pottery partially glazed are often preferred as vases on account of their rugged simplicity which contrasts with the exquisite beauty of a living blossom.

The Japanese are very fond of picnic parties, and for such occasions use special cabinets known as bento-bake. Two made of gold lacquer are pictured on the north wall. Bento-bake are fitted with food boxes, deep and shallow trays, which fit one on top of another, and with wine bottles generally made of porcelain or silver.

One print by Gakutei illustrates an antique form of book-cart, a box-like contrivance fitted with wheels and called *fuguruma*. A companion picture shows a young lady seated within an enclosure of golden screens, holding in her hand a lacquered box used for the despatching of letters; such boxes are known as *fubako*.

Two more pieces of furniture may be studied in Fig. 7. One is a low chest of drawers, a sort of bureau (tansu) made of lacquer and used for holding toiletarticles such as combs, hair-ornaments, rouge for the lips, and paint for whitening the face. The other is a lacquer stand of easel-form, on which is set a metal mirror partially covered with a silken cloth. A mirror-stand is often combined with the chest of drawers, being smaller than the one illustrated and set into the top of the bureau.

In addition to the *kakemono* displayed in the *tokonoma*, one often sees a decorative panel, called "post hide" (*hashira kakushi*), hung on one of the upright beams which comes in the middle of a partition between two corners of a room. The best of these panels are of dark cedar decorated on both sides, which are exposed alternately as fancy directs. In Fig. 5 at the left there is a wooden calendar hung on a post. This panel is divided longitudinally, and the long and short months are listed in two columns.

Heating arrangements in native houses are very simple. An open fireplace with a chimney is entirely

foreign to the Japanese home. In place of this one finds either a fireplace (furo) sunk in the floor in the tea-room and kitchen, or a portable brazier called hibachi. In each of these there is a bed of fine ashes in which a few pieces of burning charcoal glow. Hibachi are of many forms. The simplest and most common are wooden boxes, either copper lined or containing an earthen vessel for the fire-pot. Some hibachi are objects of great beauty, displaying the art of the metal-worker, the potter, and the lacquerer. Three types of braziers are illustrated in Figs. 5 and 6. In the first picture the large one in the centre is of bronze. Behind it a woman sits holding in her right hand the tongs used for stirring the coals. A man seated at the left is being entertained by a girl who plays a tune upon a row of differently sized cups. He rests his hand upon a large earthen brazier which has a cover upon it. Nearby is another brazier, tall and cylindrical, used for the heating of the water pot; a fan with which to blow the coals lies on the floor. In many of the prints one may study a special form of small brazier which goes by the name of tabako-bon. because it is a convenience used for smokers of tobacco. It consists of a box, either plain or lacquered, with or without handle, and fitted with two receptacles,an earthen vessel for hot coals and a bamboo tube or segment used as a hand cuspidor. Some of the tabakobon here illustrated are fine examples of the lacquerer's art, and one is fitted with receptacles of silver.

In severe weather the family crowds around a sunken hearth or fireplace covered with a latticed frame (kotatsu), over which a quilt can be thrown. Beneath this cover several people can conveniently slip their knees and heat the lower part of their bodies. Robes are warmed in much the same way, as may be seen in Fig. 8, where a kimono lies upon a bamboo





FIG. 7. WOMAN STANDING ON VERANDA. BY SHINSAL.

FIG. 8. KIMONO BEING WARMED OVER BRAZIER.

BY YANAGAWA SHIGENOBU.



rack beneath which burns a small fire. In the background a sash hangs over a screen of the form called *iko*, used especially as a rack on which to hang clothes.

Stone garden lanterns and stone temple lanterns have already been mentioned. Street lights were formerly somewhat similar to the temple lanterns or consisted of a wooden post to which a folding paper lantern was held in a fixed position by a tight string and protected from the rain by a small curving roof. Before the introduction of kerosene and electricity, all house lighting was effected by the use of candles and vegetable-oil or wax lamps. Candles in Japan are not fitted into sockets, but are fixed on prickets, and hence are made hollow in the centre. The wick is a roll of paper similar to a paper taper. Candlesticks are of many forms and materials. Iron, brass, pottery, porcelain, and lacquered wood, all are used in the making of them. Tall standing sticks with plate-like bases are illustrated in certain long prints in this exhibition.

Another type appears in prints by Shinsai and Hokusai. It is of metal, has three small legs and a long handle, and is fitted with an hexagonal shade covered with paper. Such lamps are convenient for carrying or for resting on the floor. A common form of lamp is the andon. It is a square frame of wood with open top, the sides of which are covered with paper. One side is in the form of a movable lid, or two sides are hinged so as to form doors. Within this frame a small triangular shelf is fastened, on which is set the small pottery lamp with wax and wick. The paper-covered frame is raised and secured to two uprights which are fixed in a square base with a small drawer convenient for extra wicks and saucers of oil. The picturesque custom of carrying a lantern when going out at night has fortunately not entirely disappeared. For this purpose the paper lantern, either of the folding or the stiff variety, is used. These travelling lanterns are almost always decorated with the crest of a family or the name of an inn or some quaint attractive design. Several appear in these prints, the one in Fig. 4 being a typical form.

HELEN C. GUNSAULUS.

USE OF TOBACCO AMONG NORTH AMERICAN INDIANS

BY

RALPH LINTON

ASSISTANT CURATOR OF NORTH AMERICAN ETHNOLOGY



Anthropology Leaflet 15

FIELD MUSEUM OF NATURAL HISTORY
CHICAGO
1924

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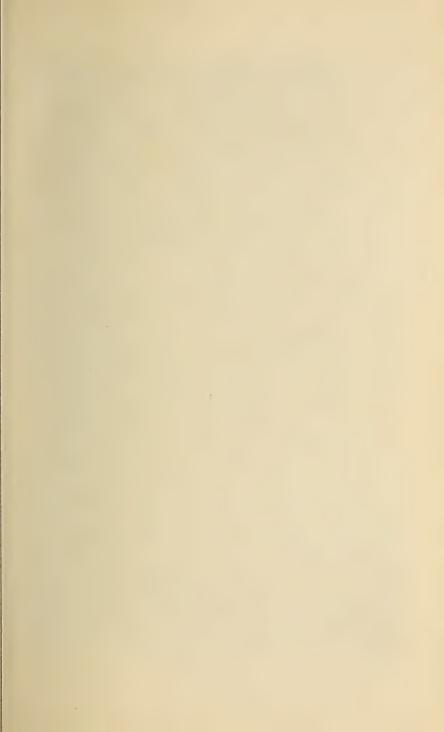
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FIELD MUSEUM OF NATURAL HISTORY CHICAGO, U. S. A.

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LEAFLET 15.

FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1924

LEAFLET

NUMBER 15

Use of Tobacco among North American Indians

Tobacco has been one of the most important gifts from the New World to the Old. In spite of the attempts of various authors to prove its Old World origin there can be no doubt that it was introduced into both Europe and Africa from America. species of Nicotiana are native to the New World. and there are only a few species which are undoubtedly extra-American. The custom of smoking is also characteristic of America. It was thoroughly established throughout eastern North and South America at the time of the discovery; and the early explorers, from Columbus on, speak of it as a strange and novel practice which they often find it hard to describe. played an important part in many religious ceremonies, and the beliefs and observances connected with it are in themselves proof of its antiquity. Hundreds of pipes have been found in the pre-Columbian mounds and village sites of the eastern United States and, although these remains cannot be dated, some of them must be of considerable age. In the southwestern United States the Basket Makers, an ancient people whose remains are found below those of the prehistoric Cliff Dwellers, were smoking pipes at a time which could not have been much later than the beginning of our era.

At the time of the discovery of America, tobacco was in use over the greater part of the continent. It

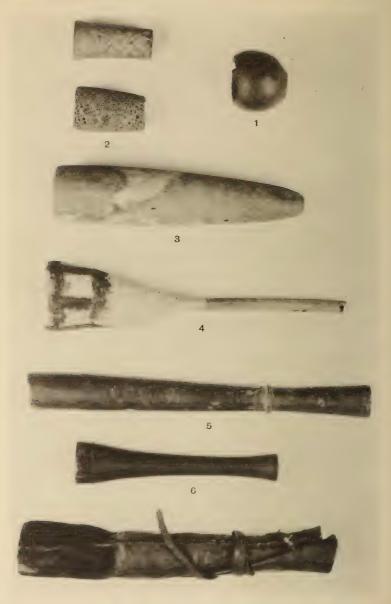
was not used in the sub-Arctic regions of North America or in the extreme southern part of Southern America. On the west coast of South America and in the Andean highlands it was replaced by another narcotic, coca (Erythroxylum coca), from which the modern drug cocaine is extracted. The coca leaves were dried and chewed with powdered lime. Tobacco was smoked throughout most of its range, but the tribes of the northwest coast of North America mixed it with shell lime and made it into small pellets which were allowed to dissolve in the mouth. The tribes of Washington, Oregon and a great part of California used it in the same way, but also smoked it. Along the eastern side of the Andean highlands in South America tobacco was both smoked and chewed. chewing tobacco was prepared like the Andean coca. and the idea was probably borrowed from coca chewing.

Although Europeans learned the custom of smoking from the Indians and even copied the Indian smoking appliances rather closely, the modern American custom of tobacco chewing may not be of Indian origin. None of the North American Indians east of the Rocky Mountains chewed tobacco, and the only point at which South American tobacco chewing reached the Atlantic Coast was a small region in northern Colombia. Modern chewing tobacco lacks the admixture of powdered lime, which was considered necessary by all Indian tobacco chewers and seems to have been an invention of the white frontiersmen. It is possible, however, that the idea of tobacco chewing was carried to the English colonies by the Spaniards, who may have learned it from the South American Indians.

The North American Indians used at least nine species of *Nicotiana*, most of which were cultivated. *Nicotiana tabacum*, the species to which practically all the modern commercial tobaccos belong, was grown



PLATE II.



AMERICAN INDIAN TOBACCO PIPES.

1. BOWL OF BASKETMAKER PIPE. 2. BOWLS OF SOUTHWESTERN TUBULAR PIPES. 3. SOUTHWESTERN TUBULAR PIPE, SANDSTONE. 4. CALIFORNIA CLAY PIPE. 5. CALIFORNIA STEATITE PIPE. 6. PIPE WITH STEATITE BOWL AND WOODEN STEM, AND PIPE CASE, CALIFORNIA.

throughout Mexico, the West Indies, and in northern and eastern South America. It was unknown north of Mexico until its introduction into Virginia by the English colonists. Nicotiana rustica, a much hardier species with a yellow flower, was grown by the Indians of the eastern United States and Canada as far west as the great plains and as far north as agriculture was possible. It was the first tobacco grown in Virginia for the European trade, but was soon supplanted there by N. tabacum. Small patches of it are still cultivated by some of the Central Algonquian tribes who use it in their ceremonies. N. attenuata was used over a larger area than any other species. It is found in its natural state in the southwestern United States and southern plains, and as a cultivated plant extends northward into western Canada and British Columbia. It was also cultivated on the lower Colorado, but the typical Pueblo tribes do not seem to have raised it. N. multivalvis was grown in Washington and Oregon, as well as by the Crow, who lived on the western edge of the plains. A related species (N. quadrivalvis) was grown by the settled tribes along the Missouri river. Still another species (N. biglovii) was used by the California tribes, and is known to have been cultivated by the Hupa. The three last-named species are rather closely related: it seems probable that N. multivalvis and N. quadrivalvis were brought into the plains area from the west, displacing *N. attenuata*.

There is very little information available on the aboriginal methods of tobacco culture in the eastern United States. Early writers say that it was not grown with other crops, as it was believed to be injurious to them, and was usually cultivated by men. Mr. Milford Chandler informs me that the Cayuga, in New York State, had permanent tobacco beds in which the plant was grown year after year. These beds were lightly manured from time to time, but were not

cultivated, and the plants were left to propagate themselves. The leaves were gathered, but the stems, with the seed pods, were left standing in the patch. The Seneca, another tribe of the Iroquois confederacy. simply scattered the seeds on the ground and had a religious prohibition against cultivating the plant. Mr. Alanson Skinner informs me that the Kickapoo and Potawatomi made large brush piles fifty or more feet long and ten or twelve feet wide which they fired about the middle of June. When the ashes were cold, the ground was hoed up, mixed with the ashes, and planted with tobacco and pumpkins. The tobacco gardens were made in the woods, remote from the villages, and were surrounded by brush fences. The Sauk also planted their tobacco in the ashes of brush-fires, but did not break the ground or cultivate the crop. In some cases they simply threw a handful of seeds on the ground near the lodge. The Kickapoo, Potawatomi and Sauk all gathered the leaves of the plant in late August. They spread them on hides or blankets, and when they had wilted, rolled them like tea-leaves. When dry, the leaves were crushed. The reason assigned for the rolling was that leaves treated in this way did not crush to fine powder like those that had been dried flat. Most of the eastern tribes grew only enough tobacco for their own needs, but one, the Tionontati, raised large quantities of it for export and. on this account, were called Tobacco People (Nation de Petun) by the French.

The best published account of aboriginal tobaccoculture is that given to G. L. Wilson by Buffalobirdwoman, an old member of the Hidatsa tribe. The Hidatsa raised a different species of tobacco from the eastern Indians (*N. quadrivalvis*), and their methods were somewhat different. She says, "The old men of the tribe who smoked each had a tobacco garden planted not very far away from our corn-fields, but

never in the same plot with one. Tobacco gardens were planted apart, because the tobacco plants have a strong smell which affects the corn; if tobacco is planted near the corn, the growing corn-stalks turn yellow, and the corn is not so good. Tobacco seed was planted at the same time sunflower seed was planted (as early in April as the soil could be worked). The owner took a hoe and made soft every foot of the tobacco garden; and with a rake he made the loosened soil level and smooth. He marked the ground with a stick into rows about eighteen inches apart, and sowed the seed very thickly in the row. He covered the newly sowed soil very lightly with earth which he raked with his hand. When rain came and warmth, the seed sprouted. The plants came up thickly so that they had to be thinned out. The owner of the garden would weed out the weak plants, leaving only the stronger standing. The earth about each plant was hilled up with a buffalo rib into a little hill like a corn hill. A very old man, I remember, used a big buffalo rib. sharpened on the edge, to work the soil and cultivate his tobacco. He caught the rib by both ends with the edge downward; and stooping over, he scraped the soil toward him, now and then raising the rib up and loosening the earth with the point at one end. He knelt as he worked.

"Tobacco plants began to blossom about the middle of June; and picking then began. Tobacco was gathered in two harvests. The first harvest was these blossoms, which we reckoned the best part of the plant for smoking. Blossoms were picked regularly every fourth day. If we neglected to pick them until the fifth day, the blossoms would begin to seed. Only the green part of the blossom was kept. When we fetched the blossoms home to the lodge, my father would spread a dry hide on the floor in front of his sacred objects and spread the blossoms on the hide to dry.

The smoke hole of the lodge, being rather large, would let through quite a strong sunbeam, and the drying blossoms were kept directly in the beam.

"When the blossoms had quite dried, my father fetched them over near the fireplace and took a piece of buffalo fat, thrust it on the end of a stick and roasted it slowly over the coals. He touched it lightly here and there to the piled up blossoms, so as to oil them slightly, but not too much. Now and then he would gently stir the pile of blossoms with a little stick, so that the whole mass might be oiled equally. When my father wanted to smoke these dried blossoms, he chopped them fine with a knife, a pipeful at a time. The blossoms were always dried in the lodge: If dried without, the sun and air took away their strength.

"About harvest time, just before frost came, the rest of the plants were gathered. He dried the plants in the lodge. For this he took sticks, about fifteen inches long, and thrust them over the beam between two of the exterior supporting posts, so that the sticks pointed a little upwards. On each of these sticks he hung two or three tobacco plants by thrusting the plants, root up, upon the stick, but without tying them. When the tobacco plants were quite dry, the leaves readily fell off. It was the stems that furnished most of the smoking. They were treated like the blossoms, with buffalo fat. We did not treat tobacco with buffalo fat except as needed for use, and to be put into the tobacco pouch ready for smoking.

"Before putting the tobacco away in the cache pit, my father was careful to put aside seed for the next year's planting. He gathered the black seeds into a small bundle about as big as a baby's fist, wrapping them in a piece of soft skin which he tied with a string. He made two or three of these bundles and tied them to the top of his bed, or to a post nearby, where there was no danger of their being disturbed."





AMERICAN INDIAN TOBACCO PIPES.

1. PIPE OF ANTELOPE BONE, CHEYENNE. 2-3. STEATITE PIPES, JOHNSON COUNTY, ILLINOIS. 4-5. LARGE STEATITE PIPES, SOUTHEASTERN UNITED STATES.

The Blackfoot and Crow, nomadic tribes of the western Plains who raised no food crops, cultivated small patches of tobacco for ceremonial use. The ground was cleared of weeds and grass, and the seed planted in holes about two inches deep, made with a pointed stick. The gardens were weeded from time to time, but do not seem to have been regularly cultivated. In both tribes tobacco culture was attended by elaborate ceremonies. Among the Crow it was in the hands of a society which also played an important part in the social life of the tribe. The right to plant tobacco was considered a special privilege which could be obtained only through a revelation from some supernatural being or through adoption by a person who had received such a revelation. The adopted person could, in turn, adopt others. Any person might receive such a revelation, and the society was composed of a number of divisions or chapters which derived their right to plant from different revelations and differed in their songs and in details of their ceremonies. Within the chapter there were certain rights, such as that of mixing seed before planting, which could only be acquired by purchase. Both men and women were eligible to membership, and the society held assemblages for dancing throughout the year.

Some of the tribes west of the Rocky Mountains also cultivated tobacco, although there is little information on their methods. On the Columbia River and in northern California a stump or fallen log was burned, and the tobacco seed scattered in the ashes.

Most of the North American Indians mixed their tobacco with other herbs before smoking it. Among the more northern tribes, especially those who did not raise tobacco themselves, this was done partly through motives of economy, but the mixture was also designed to improve the flavor, as in our own commercial

blends. The favorite smoke of the tribes of the eastern United States and Canada was called kinnikinnick. from an Algonquian word meaning "that which is mixed." Each tribe had its own formula for this mixture, but it usually consisted of tobacco, sumac leaves. and the inner bark of a species of dogwood. The bark and leaves of a number of other plants were sometimes added or substituted. A little oil was usually added to the mixture to bind the dust, which would otherwise irritate the smoker's throat and clog the pipe. Kinnikinnick was milder than pure tobacco, and was preferred by most Indians and by many white hunters and settlers. The Pueblo Indians of the Southwest smoked various mixtures of tobacco and herbs in their religious ceremonies. The greatest care was used in compounding these ceremonial mixtures, and the plants were valued largely according to the distance from which they came. The California Indians diluted their tobacco with manzanita leaves or mixed it with Jamestown weed, itself a powerful narcotic. choicest smoking mixture of the ancient Mexicans was made from tobacco and the gum of the liquidambar tree.

Three main methods of smoking were used by the American aborigines. The natives of northern and central South America and the West Indies were cigar smokers. The Central Americans and Mexicans were predominantly cigarette smokers, although some of the ancient Mexicans also used pipes. The North American Indians, with the exception of the Pueblo tribes of the Southwest, were exclusively pipe-smokers. The distribution of these three methods in America has strongly influenced European smoking customs. The Mediterranean nations, who learned the use of tobacco from cigar and cigarette using Indians, still prefer to smoke it in these forms. The English, who came in

contact with the pipe-smoking Indians of the eastern United States are still predominantly pipe-smokers. The custom of cigarette-smoking did not become general in northern Europe and the United States until quite recent times, and the vigorous opposition which it has met here seems to be due quite as much to its novelty as to any proved injurious effects.

Aboriginal cigars were practically identical with those now in use and were smoked in the same way.

The aboriginal cigarette was made with a cornhusk wrapper and contained much less tobacco than the modern commercial variety. It is still in use throughout most of Mexico and Central America and among the Pueblo Indians of the southwestern United States. Archæological finds prove that the southwestern tribes smoked pipes or reed cigarettes in ancient times, and the corn-husk cigarette may have been introduced from Mexico during the early historic period. In recent times the spread of the Peyote cult, which originated in the southwestern Plains, has carried the corn-husk cigarette to many northern tribes who were unfamiliar with it even a generation ago. The Mexicans and Pueblo Indians also smoked reed cigarettes in ancient times, and the Hopi form may be taken as typical. It consisted of a small reed, not over two and a half inches long, packed with powdered tobacco. A band of some fabric was usually bound around the reed, leaving a flap hanging down by which it was held. Hundreds of the charred butts of such cigarettes have been found in the prehistoric ruins of the Southwest, but they are lacking in the lower archaeological levels, and the earliest inhabitants of the region were probably pipe and not cigarette smokers.

The Dakota say that they did not use pipes in ancient times, but smoked their tobacco in a hole in the ground. A similar method was used by the Cree

as a makeshift. Hind says, "I asked the Indian what he would do for a smoke until he had finished the new pipe. He arose and walking to the edge of the swamp cut four reeds, and joined some pieces together. After he had made a hole through the joints, he gently pushed one extremity in a slanting direction into the earth, which he had previously made firm by pressure with his foot. He then cut out a small hole in the clay. above the extremity of the reed, and molding it with his fingers, laughingly said: 'Now give me tobacco, and I will show you how to smoke it.' He then filled the hole with a mixture of tobacco and bearberry, placed a live coal on the top, and stretching himself at full length on the ground, with his chin supported by both hands, he took the reed between his lips and enjoyed a long smoke."

Indian pipes were of two main types,—straight pipes, in which the tobacco cavity and stem were in the same plane, as in a modern cigar holder, and elbow pipes, in which the bowl was inclined upward. The straight pipe was known throughout practically the whole of America north of Mexico, but was rare in the eastern United States. It was used to the practical exclusion of all other forms in the southwestern United States and on the Pacific coast. The elaborately decorated smoking tubes of the Mexicans, mentioned by early Spanish writers, may have been straight pipes, but many of them were probably cane cigarettes. The elbow pipe was the dominant form in the eastern United States and Great Plains, and also in eastern and southern South America. It was used to a limited extent by the prehistoric Mexicans and in southern California, and was not unknown in the Southwest. In historic times it has come into use in British Columbia and Alaska, regions in which tobacco was not originally smoked.

The earliest pipes which can be even approximately dated are those of the Basket Makers, a people who lived in the southwestern United States in ancient times. Their remains are found below those of the Cliff Dwellers, and evidence along several lines indicates that they were living in the region by the beginning of the Christian era and had been absorbed or driven out by A.D. 1000. A number of their pipes have been found. They are of the straight type and are usually quite small, short, and heavy, with separate stems about two inches long (Pl. II, No. 1). The bowls are made of stone, unbaked clay, or, rarely, wood; and the stems of wood or bird-bone. The stems are attached with pitch. Many of these pipes are heavily caked, and they were probably used for personal as well as ceremonial smoking. It is impossible to tell whether the Basket Makers used tobacco in these pipes and analyses of the cake have yielded only negative results. If they did use tobacco, it was probably the wild native species (Nicotiana attenuata).

The Cliff Dwellers and ancient Pueblo tribes who succeeded the Basket Makers used straight pipes of a somewhat different type. They were usually longer and more slender than the Basket Maker pipes with somewhat thinner walls. The smaller examples, which were probably intended for personal use, seem to have had separate stems (Plate II, No. 2). Large tubular pipes, shaped like half a cigar, are also found, but were probably used only in ceremonial smoking. They are made of clay or soft stone and often show beautiful workmanship (Pl. II, No. 3). Roughly made clay pipes of this sort, popularly known as "cloud blowers," are still used by the Hopi in their ceremonies.

The California Indians, with the exception of the Diegueño, also used the straight pipe, and the form

is probably as ancient there as in the Southwest. There were various tribal and regional differences in the shape and material. Wooden pipes without separate stems were of nearly universal occurrence, and were probably the earliest form. In some regions they were carved and inlaid with abalone shell. Pipes of unbaked clay with wooden stems were used in a few localities (P. II, No. 4), but the finest California pipes were made of steatite or soapstone (Pl. II, No. 5). They were usually provided with short mouthpieces of wood or bone. The Hupa of northern California used a pipe with a small steatite bowl accurately fitted into a cavity in the end of a long tapering wooden stem (Pl. II, No. 6).

Several of the tribes of the Great Plains used straight pipes in ancient times. These pipes were made from the leg bone of an antelope wrapped with sinew at the bowl end (Pl. III, No. 1). In some cases the whole pipe was covered with rawhide or membrane. The Arapaho say that they used this form exclusively in early times, and the sacred pipe of the tribe is straight with a black stone bowl and a long tubular wooden stem. A pipe of the same form, but with a red stone bowl, was used by the Cheyenne in their Sun Dance, and the Crow have made straight stone pipe bowls until quite recent times (Pl. V, No. 3).

A number of straight pipes of stone and clay have been found in the eastern United States, but there seems to be no record of their use by the historic tribes. The examples shown (Pl. III, Nos. 2-3) are from Johnson County, Illinois. They are made from close-grained greenish brown steatite, a material soft enough to be easily worked with flint tools, but capable of taking a fine polish. The large size and excellent finish of these pipes indicates that they were intended for ceremonial rather than personal use. The bird pipe is eight and a quarter inches long, with an

internal bowl diameter of one and a quarter inches, and is an unusually good example of aboriginal sculpture. The eye sockets are roughly finished, and were probably inlaid with some other material.

Straight pipes are easier to make than elbow pipes. but have certain disadvantages. They have to be directed upward in smoking to keep the tobacco from falling out of the bowl, and the tobacco dust and juices are drawn down into the stem with results familiar to all smokers. To prevent this, many tribes are said to have put a pebble or pellet of clay in the bottom of the bowl before filling it. Even a slight angle between the bowl and stem is a great convenience to the smoker, and this improvement once hit upon, perhaps through faulty workmanship, the development of the elbow pipe was easy. Pipes from different parts of North America show all degrees of bowl inclination from the straight tube to a right angle, and there can be little doubt that the main evolution of the elbow pipe was along this line. In the Mississippi Valley and Great Plains there are, however, certain types of elbow pipe which could hardly have been developed in this way. In these the bowl rests upon a base which extends out for some distance in front of it. From various archæological finds it seems probable that these types were developed from pipes which had a corn-cob bowl pierced through the base with a reed stem.

North American elbow pipes have never been satisfactorily classified, but about twenty types are distinguishable. Only the more important of these can be mentioned here. Most of the types show a more or less continuous geographical distribution, but there was no tribe or region in which all the pipes were of the same type. The Chippewa distinguished four types of pipe which were in simultaneous use among them. These were—(1) Women's pipes, which were

small, with short stems and little decoration. (2) Men's pipes for ordinary smoking, which were somewhat larger and better made than the women's pipes, but were also small. (3) Personal pipes of famous warriors, which were larger than the ordinary pipes, with heavy decorated stems sometimes as much as five feet long. (4) Chief's pipes and ceremonial pipes, which were large, with long stems like the warrior's pipes, and were elaborately decorated. Even the pipes for ordinary smoking were highly valued and would often be carved and decorated in the owner's spare time. Stone for pipe-making, and even finished pipes, seem to have been bartered from tribe to tribe in ancient times.

The Indians made their pipes from many materials. Most of the prehistoric pipes are of stone or clay. but early records prove that wood, horn, and bone were also used by the tribes of the Atlantic Coast at the time of their first contact with Europeans. Almost all the pipes made of these perishable materials have been destroyed, but they were probably of the same types as the stone and clay pipes from this region. Clay pipes were in at least occasional use throughout the whole of North America east of the Great Plains. but the finest examples are found in the old Iroquois territory in New York State and Canada, and in the southeastern United States. Stone pipes are found from the Atlantic coast to the Rocky Mountains and seem to have been preferred by all those tribes among whom pottery making was poorly developed.

Large numbers of Iroquoian clay pipes have been found in old cemeteries and village sites, and their form makes them easily distinguishable in collections. They are made of fine hard-burned clay and have a graceful trumpet shape, with rather long slender bowls and short stems (Pl. IV, No. 3). The upper part of the bowl is often encircled by a band of incised

LEAFLET 15.



AMERICAN INDIAN TOBACCO PIPES.

1. MONITOR PIPE, HOPEWELL MOUNDS, OHIO. 2. BIRD AND FISH PIPE, HOPEWELL MOUNDS, OHIO. 3. IROQUOIS CLAY PIPE. 4. CATAWBA CLAY PIPES (MODERN). 5. MEXICAN CLAY PIPES (TOLTEC?).



designs or modeled into a human face or bird's head. They were not provided with separate stems.

Archæological finds on the Atlantic coast prove that the Indians of that region also used small clay pipes, although the early visitors only mention large pipes with excessively long stems. It seems probable that the larger forms were semi-ceremonial, like the warrior's and chief's pipes of the Chippewa, while the small pipes were used for individual smoking. Many of these small pipes resemble rather closely the early European trade pipes, and modern clay pipes and straight briers, but the type is unquestionably pre-European. It was probably the prototype from which modern European pipes were developed. Some of the ancient pipes were made in one piece, while others were evidently provided with separate stems, probably reeds. Identical forms were made in stone in this region.

In the southeastern United States short clay pipes with reed or wooden stems seem to have been in common use. They were often rather elaborately decorated. with modeled figures of birds, clay pellets, or incised designs. This form of pipe is still in use among the Catawba, although many of their pipes show the influence of European models (Pl. IV, No. 4).

Pottery pipes with flaring bowls and slender stems, sometimes as much as eighteen inches long, are found in prehistoric Caddoan sites in Arkansas. The stems are excessively fragile, and as these pipes are usually found in the corners of graves, it seems probable that they were made for mortuary use rather than actual smoking. They are clearly imitations of a type which had a corn-cob bowl impaled on a reed stem.

Stone pipes occur over a wider territory than pottery pipes and show a greater diversity of form. There are some regions in which the same shapes occur in both stone and pottery, but there are several

types of pipe which appear never to have been made of clay. Most of the stones used in pipe-making were quite soft, but a few pipes of quartzite and other hard rocks have been found. The material was carefully selected, and was usually obtained from regular quarries. In the eastern United States steatite, serpentine and slate were the stones most used. In the upper Mississippi valley and Great Plains the favorite material was catlinite, a fine-grained claystone soft enough to be easily worked with stone tools, but firm enough to take a high polish. Deposits of this material have been found in several states, and a local variety was used by the Ohio Mound Builders. most famous catlinite quarries are in southeastern Minnesota and yield the highly prized red stone from which so many Plains Indian pipes are made. Here the catlinite occurs as a narrow layer, nowhere more than twenty inches thick, between strata of compact quartzite five to eight feet thick. To reach the catlinite it was necessary to break away the quartzite with stone mauls or shatter it by building large fires upon it and then dashing water on the heated stone. old Indian workings extend for more than a mile along the face of the deposit, and the quarry must have been in use for several centuries. According to Indian traditions, the place was visited by many different tribes, who considered it common property and abstained from hostilities there. In historic times the Dakota considered it exclusively their property. and part of it was set aside for their use when they ceded their other lands in the vicinity. They still visit it occasionally to obtain stone for their pipes. White men have also worked the quarry, and in 1865 and 1866 over two thousand pipes of this material were made by the Northwestern Fur Company for their trade with the Indians.

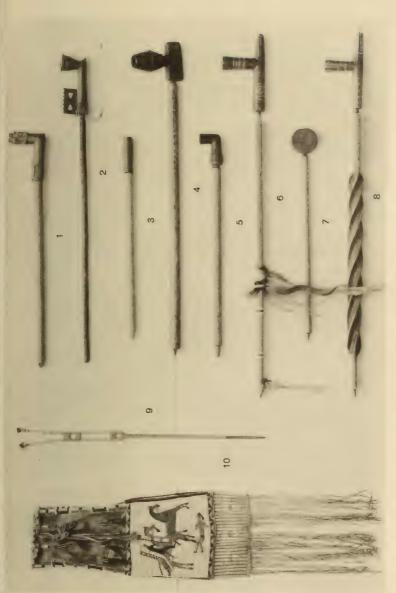
The finest aboriginal pipes are unquestionably the so-called monitor pipes found in the Ohio mounds. Many of these show such excellence of design and execution that early investigators doubted whether they could be the work of American Indians. They are made of soft stone or of fire clay, which was carved like stone, but never of pottery. The type is characterized by a long, broad, and very thin base from the center of which the bowl rises vertically. The base may be either flat or convex. The bowl is often made in the form of an animal or bird, and some of these effigies show artistic ability of a high order. Even when the style is impressionistic, the species is usually unmistakable. The significance of these carvings can only be conjectured, but so many species are shown that it seems probable that they represent the personal guardians of the pipes' owners. None of the historic tribes used pipes of this type, and the finest examples are unquestionably pre-Columbian. One of the pipes illustrated (Pl. IV, No. 1) is of typical monitor form, but has the bowl incised with designs representing bird's heads. In the other (Pl. IV. No. 2) the shape has been modified to suit the subject. a roseate spoonbill resting on the back of some large water animal, probably a mud puppy (Necturus maculosus).

A number of large stone pipes have been found in the southeastern United States (Pl. III, Nos. 4-5). Some of these pipes weigh several pounds and, as they are everywhere associated with smaller forms of stone or clay, they were probably made for ceremonial use. They seem to have been provided with long, thick wooden stems. These heavy pipes are of several types, and are usually well made, but are inferior to the monitor pipes in design and execution. In Georgia, Alabama, and the lower Mississippi valley there is a very massive short type in which the bowl and stem

holes are conical and of nearly equal size and depth. These biconical pipes are often made in the form of human effigies or of highly conventionalized animals or birds.

Early visitors to the north Atlantic Coast say that the Indians of that region used heavy carved pipes with stems three to six feet long. Large stone pipes are hardly ever found in this region, and even small carved pipes are extremely rare. It seems probable that these early forms either had quite small, plain bowls with heavy carved stems, or were made of wood or other perishable material. Holm says that the Pennsylvania Indians made their pipe bowls of horn, and several of the Algonquian tribes have made a considerable use of carved wooden pipes in historic times. Among many tribes the stems of ceremonial pipes were elaborately decorated, and were considered more important than the bowls.

Plains Indian pipes are commoner in collections than those from any other region. The Blackfoot preferred pipes of black stone, with acorn-shaped bowls reminiscent of those in use among the Micmac and other northeastern Algonquian tribes (Pl.V, No. 4), but throughout most of the Plains the favorite pipe was made of Minnesota catlinite, and was of Sioux type (Pl. V, Nos. 6-8). This type is common in museums and private collections. It has a tubular bowl set vertically on a long base which projects beyond the bowl as a pointed spur. This projecting base is also found in the monitor pipes, and the two types may be remotely related. Pipes of the Sioux type have been made in great numbers by both whites and Indians, and many of those in collections were probably manufactured by whites. Either early white traders, or the tribes on the eastern edge of the Plains originated the practice of inlaying the bowls and bases with lead. The pipe was cut to nearly its final



AMERICAN INDIAN TOBACCO PIPES.

3. CHEYENNE SUN-DANCE PIPE. 4. BLACKFOOT PIPE. 5-7. CHEYENNE PIPES. 6-8. SIOUX. 1-2. PAWNEE SACRED PIPES. 9. PIPE TAMPER, SIOUX.



form, and a clay mold made. Deep grooves were then cut in the stone to receive the lead, and the pipe was returned to the mold, and the metal poured. The metal and stone were then rubbed down to a smooth surface. Valuable pipes which had been broken were sometimes repaired in this way.

All Plains Indian pipes, with the exception of the straight bone pipes previously noted, were provided with long, heavy, wooden stems. Some tribes preferred tubular, others flat stems. In ancient times most of the long pipe stems were probably split lengthwise, the smoke passage excavated, and the two halves glued together. Some of the northern and western tribes used a solid tubular stem which they pierced by an ingenious method. They selected a young ash shoot which had a small pith cavity in the center and caught a wood-boring grub. They made a hole in one end of the shoot and inserted the grub, closing the opening behind it. The shoot was then hung over a fire, and the grub, following the pith as the line of least resistance, drilled a hole through the shaft from end to end. When it emerged, it was captured and returned to the place where it had been found with appropriate thanks. Split tubular stems are rather unsatisfactory, as the halves are liable to warp and separate. The broad, flat pipe-stem was probably invented to give a wider surface for the glue and hence a firmer joint. It reached its highest development among the Dakota, and they seem to have been the inventors of the "puzzle stem," a broad, flat stem pierced with designs so that the smoke passage had to make several turns between the pipe-bowl and mouth-piece. Pipe stems were often decorated with elaborate wrappings which helped to hold the halves together.

A peculiar form of pipe, which may be a variant of the Sioux type, is found in a limited area in the upper Mississippi valley. These pipes usually have bases with long projecting spurs, but the bowl is smaller than the stem hole and very low. It is surrounded by a broad, thin disk sometimes as much as three and a half inches across. Some of these "disk pipes" suggest the shallow-bowled pipes of the Asiatics, but the form is certainly prehistoric. Pipes of this type are rare, and were probably made for ceremonial use. One of the sacred pipes of the Omaha is of this sort.

Although all the Mexican Indians were predominantly cigarette-smokers, ancient clay pipes of elbow type have been found in the valley of Mexico (Pl. IV, No. 5). They are not mentioned by any of the early Spanish writers, but the specimens found are unquestionably of native workmanship, and are probably prehistoric. The commonest form has a bulb-shaped bowl and a rather thick stem flattened on the bottom, so that the pipe will stand upright. The occurrence of elbow pipes in a limited area, far from any other in which they were known, is difficult to account for. Some of these pipes resemble forms in use in the southeastern United States and lower Mississippi valley.

Elbow pipes were also used on the Northwest Coast and in Alaska, but they were introduced into these regions after the discovery of America. The Alaskan Eskimo apparently learned the practice of smoking from the natives of Siberia, and their pipes are of Asiatic type, with very small bowls (Pl. VI, No. 1). Their best pipes are made from walrus tusks, and are often elaborately etched. The tusk is usually split lengthwise and the halves joined in such a way that they can be taken apart to obtain the juice distilled in smoking. The juice was mixed with fungus

ashes for chewing or with the smoking tobacco. Poorly made pipes of Eskimo form were used by the Athapascan tribes of interior Alaska, who were taught to smoke by the Eskimo.

The Indians of the Northwest Coast chewed to-bacco in ancient times, but did not smoke it. The more northern tribes may have adopted smoking from Asia by way of the Eskimo, but their pipes show little resemblance to the Asiatic forms, and they probably learned the practice from white visitors. The natives of this region are expert carvers, and nearly all their pipes are decorated with figures of men or totemic animals. Wood is the favorite material (Pl. VI, No. 2), but bone and antler are also used and some of the tribes make very elaborate pipes of black slate (Pl. VI, No. 3). The slate pipes are much sought after by collectors, and many of them seem to have been made for sale rather than use.

Pipes are mentioned among the goods given to the Indians in some of the earliest English land-purchases, and they were regularly carried by the white traders with the Indians. An English pipe-maker. Robert Cotton, came to Virginia in 1608. The earliest trade pipes were made of clay and seem to have been patterned after the small pipes used for personal smoking by the coast tribes. Those made in the various European countries showed minor differences, but were all of nearly the same form. The later trade pipes show an increasing diversity in shape and decoration, but the whites apparently did not attempt to make the larger ceremonial forms. The most important contribution on the part of the whites to the Indian tobacco complex was the tomahawk pipe. This implement had a pipe-bowl above and a blade below, and could be used either as a pipe or as a weapon. We do not know when or where it originated, but it

apparently did not come into general use in the English Colonies before 1750. All the European nations equipped their Indian allies with tomahawk pipes, and a number of types are recognized by collectors. The pipe-bowl was nearly always of acorn shape, like the pipe used by the northeastern Algonquians, but the blade varied considerably. In general, the English and early American tomahawks had straight-edged hatchet-blades, and the French ones had diamond-shaped blades, like spear-heads. Spanish tomahawks had flaring blades with curved edges, like mediæval battle-axes. There were a number of white tomahawk-makers whose work differed in minor details; and fine inlaid, chased, or inscribed tomahawks were sometimes made for presentation to important chiefs.

An Indian warrior was rarely without his pipe and tobacco, and special tobacco-bags were used by all the tribes east of the Rocky Mountains. In early times, these bags were usually made from the skins of small animals taken off whole. The Eastern Woodland tribes used a rather small bag which was tied to the belt. The Plains tribes used a larger bag, often made from a fawn skin, in which they carried both the pipe and tobacco. In historic times the northern Plains Indians have used long, flat rectangular bags decorated with beads or porcupine quills, but this type apparently is not an ancient one (Pl. V, No. 10). Several of the Plains tribes also had special boards on which the tobacco was cut up and elaborate pipe tampers (Pl. V. No. 9). These accessories were used mainly in ceremonial smoking. In Pawnee ceremonies the pipe was always tamped with an arrow captured from the enemy. It was forbidden to pack it with the fingers, as the gods might think that the man who did so offered himself with the tobacco and take his life. The tribes of the Northwest Coast crushed their tobacco

in mortars. These were usually made from whale vertebrae, and were often elaborately carved.

Even if documentary evidence of the New World origin of tobacco were lacking, its importance in the religious and ceremonial life of the Indians would leave little doubt of the antiquity of its use among them. Among all the tribes east of the Rocky Mountains tobacco was the favorite offering to the supernatural powers, and among the Central Algonquians no ceremony could take place without it. As a sacrifice it might be burned as incense, cast into the air or on the ground, or buried. There were sacred places at which every visitor left a tobacco offering, and during storms it was thrown into lakes and rivers to appease the under-water powers. Smoking was indulged in on all solemn occasions, such as councils, and was a necessary part of most religious ceremonies. In such ceremonial smoking the methods of picking up, filling, and lighting the pipe were usually rigidly prescribed. and the first smoke was offered to the spirits. The methods of passing and holding the pipe were also prescribed and differed with the ceremony and even with the personal taboos of the smokers. In the religious ceremonies of the Hopi, the head chief was attended by an assistant of nearly equal rank, who ceremonially lighted the pipe, and with certain formalities and set words handed it to the chief, who blew the smoke to the world quarters and over the altar as a preliminary to his invocation.

The so-called medicine-bundles, collections of sacred objects around which the religious life of many of the Central Algonquians and Plains Tribes centered, often contained pipes which were smoked in the ceremonies attending the opening of the bundle (Pl. V, Nos. 1-2). In some cases the pipe itself seems to have been the most important object, and the palladium of the Arapaho tribe is a straight pipe of black stone.

Among some of the eastern Siouan tribes each clan had its sacred pipe which was used at namings and other clan ceremonies. The stems of these pipes were covered with elaborate wrappings and other ornaments which symbolized the various supernatural powers invoked in the ceremonies, and the sanctity of the pipe lay in its stem rather than its bowl.

The calumet, so often mentioned in early American records, was not a pipe, but an elaborately decorated shaft, pierced like a pipe stem, to which a pipe bowl was not necessarily attached. The name itself is not of Indian origin, but is a Norman-French word meaning a reed or tube. J. N. B. Hewitt says, "From the meager descriptions of the calumet and its uses it would seem that it has a ceremonially symbolic history independent of that of the pipe; and that when the pipe became an altar, by its employment for burning sacrificial tobacco to the gods, convenience and convention united the already highly symbolic calumet shafts and the sacrificial tobacco altar, the pipe bowl: hence it became one of the most profoundly sacred objects known to the Indians of northern America. As the colors and other adornments of the shaft represent symbolically various dominant gods of the Indian pantheon, it follows that the symbolism of the calumet and pipe represented a veritable executive council of the gods. Moreover, in some of the elaborate ceremonies in which it was necessary to portray this symbolism the employment of two shafts became necessary, because the one with its colors and accessory adornments represented the procreative male power and his aid, and was denominated the male, the fatherhood of nature: and the other with its colors and necessary adornments represented the reproductive female power and her aid, and was denominated the female, the motherhood of nature.

"The calumet was employed by ambassadors and travelers as a passport; it was used in ceremonies designed to conciliate foreign and hostile nations and to conclude lasting peace; to ratify the alliance of friendly tribes; to secure favorable weather for journeys; to bring needed rain; and to attest contracts and treaties which could not be violated without incurring the wrath of the gods. The use of the calumet was inculcated by religious precept and example. A chant and a dance have become known as the chant and dance of the calumet; together they were employed as an invocation to one or more of the gods. By naming in the chant the souls of those against whom war must be waged, such persons were doomed to die at the hands of the person so naming them. The dance and chant were rather in honor of the calumet than with the calumet.

"The Omaha and cognate names for this dance and chant signify 'to make a sacred kinship,' but not 'to dance.' This is a key to the esoteric significance of the use of the calumet. The one for whom the dance for the calumet was performed became thereby the adopted son of the performer. One might ask another to dance the Calumet dance for him, or one might offer to perform this dance for another, but in either case the offer or invitation could be declined.

"Charlevoix (1721) says that if the calumet is offered and accepted it is the custom to smoke in the calumet, and the engagements contracted are held sacred and inviolable, in just so far as such human things are inviolable. The Indians profess that the violation of such an engagement never escapes just punishment. In the heat of battle, if an adversary offer the calumet to his opponent and he accept it, the weapons on both sides are at once laid down; but to accept or to refuse the offer of the calumet is optional.

There are calumets for various kinds of public engagements, and when such bargains are made an exchange of calumets is usual, in this manner rendering the contract or bargain sacred.

"By smoking together in the calumet the contracting parties intend to invoke the sun and the other gods as witnesses of the mutual obligations assumed by the parties, and as a guaranty the one to the other that they shall be fulfilled. This is accomplished by blowing the smoke toward the sky, the four world quarters, and the earth, with a suitable invocation.

"There were calumets for commerce and trade and for other social and political purposes; but the most important were those designed for war and those for peace and brotherhood. It was vitally necessary. however, that they should be distinguishable at once, lest through ignorance and inattention one should become the victim of treachery. The Indians in general chose not or dared not to violate openly the faith attested by the calumet, and sought to deceive an intended victim by the use of a false calumet of peace in an endeavor to make the victim in some measure responsible for the consequences. On one occasion a band of Sioux, seeking to destroy some Indians and their protectors, a French officer and his men, presented, in the guise of friendship, twelve calumets. apparently of peace; but the officer, who was versed in such matters and whose suspicion was aroused by the number offered, consulted an astute Indian attached to his force, who caused him to see that among the twelve one of the calumet shafts was not matted with hair like the others, and that on the shaft was graven the figure of a viper, coiled around it. officer was made to understand that this was the sign of covert treachery, thus frustrating the intended Sioux plot."

The use of the calumet was almost universal in the Mississippi valley and among the Plains tribes, but in the Ohio and St. Lawrence valleys and southward its use is not so definitely shown. The symbolism and ritual of the calumet reached its highest development among the Pawnee and neighboring Siouan tribes and the concept probably originated in this region.

R. LINTON.

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3. PIPE OF BLACK SLATE, HAIDA. 2. WOODEN PIPE, HAIDA. 1. PIPE MADE FROM WALRUS TUSK, ESKIMO,



USE OF TOBACCO IN MEXICO AND SOUTH AMERICA

BY

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FORMERLY ASSISTANT CURATOR OF MEXICAN AND SOUTH AMERICAN ARCHAEOLOGY

No. 16



ANTHROPOLOGY
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FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1924

LEAFLET

NUMBER 16

Use of Tobacco in Mexico and South America

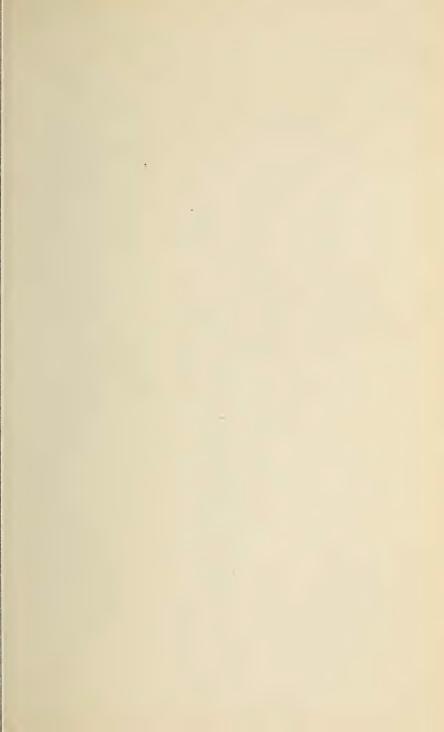
At the time of the discovery of America, tobacco was cultivated by the American natives in practically every region to which it was naturally suited, and, due to its ease of preservation and trade, its use extended even beyond the boundaries of agriculture and pottery in America. The principal species, however, *Nicotiana tabacum*, was unknown in pre-Columbian times north of Mexico, the Indians of the United States employing other varieties, and it is with this species exclusively, therefore, that the present essay is concerned.

While the use of tobacco was, in aboriginal times, wide-spread over practically all of America, the methods of its use varied greatly in different sections. Certain of these methods seem to be more primitive than others, but whether a definite evolutionary scheme may be postulated is, to say the least, doubtful. It is quite certain, for instance, that the cultivation of tobacco, as practised by almost all tribes, is a later development from the gathering of wild tobacco which must have been the primitive custom. It is a tempting evolutionary scheme to suggest that the earliest method of tobacco use was in the form of a cigar,—crushed tobacco leaves rolled in a large tobacco leaf. The next step was to the cigarette, in which the tobacco was rolled in a better wrapper, of corn-husk or bark cloth. This led naturally to the tubular pipe, at first made of a hollow reed and then of pottery or stone. From this, finally, by a turn in the bowl which permitted the pipe to be held more horizontally, evolved the modern "elbow" pipe. Nevertheless, while this is a rational scheme, it must be admitted that there is no evidence that it is an historical one, except possibly in some instances of the last two steps where tubular pipes are found among some groups in ceremonial religious use, while the ordinary pipes are of the "elbow" type, thus illustrating the usual conservative tendencies of religious observance.

Similarly, it is quite probable that the earliest use of tobacco was in religious ceremonies, and that its use as a pastime was a more recent development. Plants with intoxicating and narcotic properties have always been looked upon by primitive peoples as endowed with supernatural powers on account of their ability to put the taker in an abnormal condition, during which he may behold visions and receive supernatural impressions, and consequently tobacco, in almost every Indian group, played a most important part in religious and esoteric ceremonies. But, whether used in religious observances or as a personal pastime, tobacco was apparently employed in pre-Columbian America as to-day, mainly by men.

Tobacco was also used for chewing, snuffing and several forms of licking or drinking by the aborigines of certain portions of America; these practises, however, as will be seen, were due to the influence of other plant customs and were not typical of tobacco usages.

Not only have these various methods and customs of taking tobacco persisted until to-day among the native tribes, but they have also been largely adopted by the modern civilized populations of these same regions and, interesting to state, have influenced in diverse ways the tobacco habits of the various parts of Europe.



LEAFLET 16.



In the West Indies tobacco was employed in the form of a cigar—dried leaves rolled in a larger leaf. This custom also obtained through most of northcentral South America. The native peoples of the Antilles are now extinct, although the cigar still remains the favorite smoke in that region, but in South America many tribes exist in their original state of culture who take their tobacco in the form of cigars.

The first European contact with tobacco was, apparently, when Columbus with his little caravels, after making his first landfall on the small island of San Salvador or Watling's Island, steered again toward the southwest, meeting at sea an Indian canoe loaded, among other things, with dried leaves. The use of tobacco was, however, first observed by two messengers whom Columbus sent ashore in Cuba, or, according to other authorities, in Hispaniola (Santo Domingo). One of these men was a learned Jew who could speak Chaldean, Hebrew and Arabic and who, Columbus felt sure, would therefore be able to speak with any deputy official of the Grand Khan of Cathay (China) whom he might encounter. They met many men carrying firebrands and packages of dried herbs rolled up in a dried leaf. Lighting one end of this, they sucked the smoke out of the other end, giving the information that it comforted the limbs, intoxicated them, made them sleepy, and lessened their weariness. and that the objects were called tabacos.

Thus was the cigar first discovered in what still remains its principal stronghold, Cuba. It is of interest to note that the aboriginal name, *tabaco*, apparently meant not *tobacco* as such, but *cigar*, and that at present, in this Antillean region, a cigar is still called "un tabaco." Our word is, of course, derived from the aboriginal form *tabaco*, which is the modern Spanish form. This word is in nearly uniform use to-day, but

in earlier years the Brazilian term petun and the Aztec name picietl were also in use.

The aboriginal inhabitants of the Antilles, however, were practically exterminated within a half century after the discovery, so that the only information with regard to the native processes of cultivating, curing, and using tobacco must be derived from historical records of the time of the conquest. No pipes were used in the West Indies, so that none of the paraphernalia of smoking in this region has survived.

Here, as almost universally in America, tobacco was employed by native "medicine-men," in their quasi-magical ceremonies for the cure of the sick. Benzoni, one of the earliest chroniclers, writes, "In La España and other islands when their doctors wanted to cure a sick man, they went to the place where they were to administer the smoke, and when the patient was thoroughly intoxicated by it the cure was mostly effected."

In the north-central South American region, the use of the cigar, and in some places the cigarette, varies greatly in detail from tribe to tribe. Apparently, most of these tribes smoke tobacco as a solace and pastime, as is the modern custom, tobacco playing but a small part in the religious ceremonials and esoteric observances. Patches of tobacco are planted and grown, generally by the women, though among some tribes even the cultivation of tobacco is taboo to women. The leaves are then dried and preserved, to be used as required in the manufacture of cigars or cigarettes, the latter being frequently made with a wrapper of vegetable fiber or a sort of cloth beaten out from bark. In Guiana the tobacco is sometimes dipped in honey.

In certain regions, peculiar customs of smoking prevail. Thus Lionel Wafer reports the practise of a certain Panama tribe in 1680 as follows: "The dried



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tobacco leaves are stripped from the stalk, and laving two or three leaves one upon another they roll all up sideways into a long roll, yet leaving a little hollow; round this they roll other leaves one after another in the same manner, but close and hard, till the roll is as big as one's wrist and two or three feet in length. Their way of smoking when they are in company together is thus: A boy lights one end of a roll and burns it to a coal, wetting the part next to it to keep it from wasting too fast: the end so lighted, he puts into his mouth, and blows the smoke through the whole length of the roll into the face of everyone of the company or council, though there be two or three hundred of them. Then they, sitting in their usual posture upon forms, make with their hands held together a kind of funnel around their mouths and noses; into this they receive the smoke as it is blown upon them, snuffing it up greedily and strongly, as long as ever they are able to hold their breath, and seeming to bless themselves as it were with the refreshment it gives them."

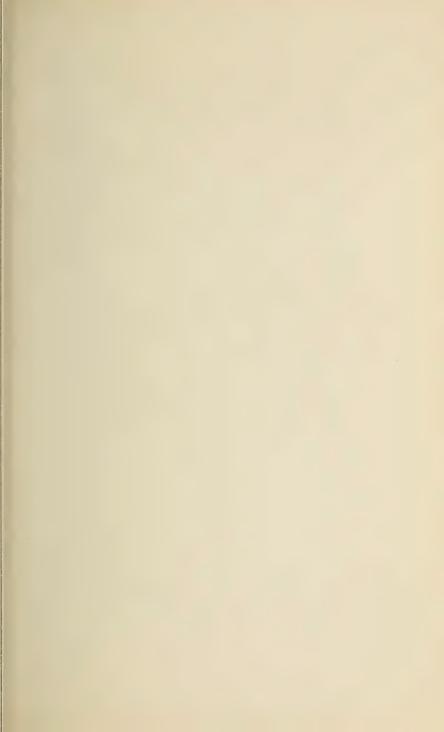
Mexico and Central America and some parts of northern South America were the regions in which the cigarette was the favored form of smoking tobacco, crushed tobacco leaves being rolled in a wrapper of corn-husk or bark cloth. The corn-husk cigarette is at present the popular smoke of millions of Mexican Indians, and the cigarette, in fact as well as in popular belief, is the hall-mark of the Mexican. Few cigars or pipes are smoked in Mexico to-day.

Benzoni thus refers to the preparation and use of tobacco among these natives: "When the leaves are in season, they pick them, tie them up in bundles and suspend them near the fireplace until they are very dry, and when they wish to use them, they take a leaf of their grain, and putting one of the others into it, they roll them round tight together; then they set fire to one end and, putting the other into the mouth, they draw their breath up through it, and they retain it as long as they can, and so much do they fill themselves with this cruel smoke that they lose their reason; and some there are who take so much of it that they fall down as if they were dead and remain the greater part of the day or night stupefied."

The regions in which the cigar and cigarette were the customary forms of taking tobacco were settled almost exclusively by the Spanish who, naturally, adopted the customs of the natives so that at present these are the favorite methods of Spanish-speaking countries, among whom the pipe finds little favor. In the same way, it has only been within the past few decades, and after considerable conservative opposition, that the cigarette has secured the stamp of approval in northern countries.

A transition form between the cigarette and the pipe was employed in aboriginal America by the Indians of Mexico and the Rocky Mountain states of this country. This was the reed cigarette which consisted of crushed tobacco leaves crammed into a hollow section of cane or reed. Many examples of these have been found in excavations in the arid regions of Arizona and New Mexico, but in most localities the reeds have perished utterly, and the custom has gone out of use.

A further development is found in the tubular pipes which were in common use in the same general region. These were of pottery or stone and were, of course, much more permanent than the reed sections. Among most tribes these were coarse and crude, but apparently the Aztec nobles of Montezuma's time employed delicate ornate tubes of expensive materials which may be compared to the cigarette-holders of the present time. None of these fine ornate pipes escaped the cupidity of the invaders and survived, it being



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necessary to derive our knowledge of them and their use from the accounts left by the historians of that period. However, some of the ancient hieroglyphs carved on monuments or drawn on the maguey-paper books known as codices depict men, probably priests, in the act of using these tubular pipes, though the point as to whether the smokers were inhaling the fumes or blowing them out in a religious fumigation ceremony has occasioned some argument.

According to the accounts of eye-witnesses, the Aztec dignitaries of the court of Montezuma were accustomed to smoke after dinner before the siesta, to which they were as devoted as the Spaniard himself. The tobacco was generally mixed with other aromatic substances, principally liquidambar (Liquidambar styraciflua), and smoked in tubes or pipes, which were richly painted and gilded, and frequently made of tortoise-shell or silver. They compressed the nostrils with the fingers and inhaled the smoke, frequently, it is reported, swallowing it. However, it must be remembered that the custom was a new one to the Spaniards and one for which a descriptive terminology had not vet become current. Thus the oldest accounts frequently employ such terms as "swallow" and "drink" in attempting to describe the new and unaccustomed practise.

According to Clavigero, "After dining, the lords used to compose themselves to sleep with the smoke of tobacco. This plant was greatly in use among the Mexicans. They made various plasters with it, and took it not only in smoke at the mouth, but also in snuff at the nose. In order to smoke it, they put the leaves, with the gum of liquidambar and other hot, warm, and odoriferous herbs, into a little pipe of wood or reed or some other more valuable substance. They received the smoke by sucking the pipe and shutting

the nostrils with the fingers, so that it might pass by the breath more easily toward the lungs."

While, apparently, tobacco was smoked largely in ancient Mexico merely for the pleasurable sensation. it evidently also was believed to possess much the same supernatural, curative, and religious functions and properties which it enjoyed to a greater extent among the Indians of the United States. It is difficult to distinguish accurately, in the equivocal language of the old historians, between the use of tobacco for recreational smoking, and as devotional incense, or between tobacco and other aromatic products, such as copal. The words "fumigating," "incensing" and "perfuming" are frequently used in old records, and it is sometimes difficult to determine whether these words were used in their modern sense or in an endeavor to find descriptive terms for what was, to the writer, a new and peculiar custom. However, among some modern Indian tribes of Mexico, tobacco is smoked on many occasions of religious ceremony. smoke being blown to the four cardinal points, and on the affected parts of persons undergoing curative treatment by the shaman-priest. The white clouds of tobacco smoke especially are believed to have an intimate connection with the rain clouds, and play an important part in many ceremonies for the securing of rain.

While Mexico is preëminently a region of the cigarette and the tubular pipe, and the modern pipe with its bowl of "elbow" shape is not mentioned by the early chroniclers, yet specimens of this latter type in very interesting and artistic shapes are far from uncommon in archæological collections from the Valley of Mexico. This is the more unusual in that the elbow pipe is not known in northern Mexico or the adjacent parts of the United States. However, the general type and nature of the pottery of which these pipes were made,

is more characteristic of the Toltecs, the predecessors of the Aztecs in the Valley of Mexico, than of the latter, which fact may explain their apparent absence at the time of the Conquest. A number of these pipes are shown in the accompanying plates.

The Mexican pottery pipe of pre-Columbian days differs only in detail from the modern "clay" pipe. The stem is straight with a smoke passage of small caliber; the bowl is of ample or large capacity and set at the end of the stem, generally at an obtuse angle. This inclination of the bowl is one of the characteristic features of Mexican pipes, as well as the flattened base of the stem which enables the pipe to be set down with the bowl upright. Apparently they were smoked without wooden stems, though, if these had ever been used, they would have disappeared with the lapse of time. They are always well, artistically and delicately shaped with polished surfaces of red, chocolate or buff color, decorated with incised lines, but never painted except in solid colors. The bowls are frequently modeled in grotesque forms.

The most frequent type of Mexican pipe is one decorated with incised lines to resemble conventionalized animal heads with large eyes and long beaks, probably representing birds. There are two forms of these, one of a chocolate color, the beak very flat and the concentric eyes with a central dot, probably representing some species of duck. The second form is always of red or buff pottery and shows a high hooked beak ending in a scroll. The eyes are also of concentric circles. Presumably another species of bird was intended. In both forms the art is very conventionalized, the head forming the bowl, and the beak, artificially prolonged, the stem.

In other Mexican pipes the bowls are modeled in the form of grotesque human or animal heads, flowers, or, in one specimen, a human foot. Other pipes are plain without any attempt at artistic effect.

The "elbow" pipes of Mexico are, as we have seen, not typical of this region and possibly an independent local development. This type is, however, the characteristic form of smoking implement in use in eastern and south-central South America, in eastern and southern Brazil, Paraguay, Uruguay and northern Argentina. Pottery pipes of pre-Columbian times are frequently found in these regions, though probably then. as at present, the usual type was made of wood. The best of these pottery pipes come from the Calchagui region of northwest Argentina. They somewhat resemble the modern "clay" pipe, but are roughly made of coarse pottery with tubular stems of a large caliber. The bowls are generally large and conical with two short legs on which the pipe can be rested upright, and frequently rude relief ornament has been applied to the bowls so that, in combination with the short supports, a grotesque animal form is suggested. Better pipes of polished black pottery with incised decorations are occasionally found.

The pipes of the modern peoples are well illustrated by those of the Indians of the Gran Chaco of Paraguay. The stems are small, short, thin, and made of hollow cactus wood. While a few groups make bowls of rude, massive pottery, the usual bowl is made of hard wood in a high cylindrical or slightly conical shape. Many of these are crude, but some are well shaped and finished; some are large, but the majority rather small. Most are plain, but a few are rudely carved. Generally the base of the bowl projects below the stem orifice to some distance, and the pipe bears a superficial resemblance to a modern corn-cob pipe, which may have been its prototype.

The Gran Chaco practically marks the southernmost limit of tobacco raising. Among the Tehuelche







of southern Argentina, tobacco is such a luxury that it is mixed with wood shavings, and among the tribes of Tierra del Fuego, tobacco is utterly unknown.

While smoking was in pre-Columbian times as at present the favorite method of taking tobacco, yet chewing and snuffing tobacco and licking and drinking decoctions of it were also practised, sometimes in place of smoking and sometimes in conjunction with it. These habits, especially snuffing and chewing, were also adopted by European races, and in former times had a vogue and sanction at least as great as smoking, but of late years they have lost caste and social prestige and seem to be on the wane. Both of these customs were, and are, in aboriginal America, primarily associated with vegetable products other than tobacco. The tobacco-chewing area is found in western South America near the Andes, and is doubtless related to the more characteristic coca-chewing custom of the Andean highlands. The snuffing habit is wider-spread over most of the Amazonian area and the West Indies. However, the snuff taken throughout this area is more frequently made from other plants than tobacco.

In the western part of the Amazonian forests, near the foot of the Andes, smoking is unknown, but tobacco is licked or, at times, chewed instead. This is, doubtless, due to the influence of the coca-chewing habit of the Andean highlands, many of these tobaccolicking tribes also chewing the coca leaf. Among these tribes a decoction is generally made by boiling down the tobacco leaves with water until a strong, thick residue of a tarry consistency and color is produced. Small quantities of this concentrated solution are placed on the tongue from time to time, and the desired narcotic effect thus secured.

The Arhuaco Indians of the Sierra Nevada de Santa Marta in northern Colombia, for instance, carry with them constantly a tiny hollow gourd containing a little of this thick dark decoction. When two men meet on the trail or a visit is made, the gourds are exchanged, and each man dips his finger into the other's gourd and touches the tobacco to his lips, or, more frequently, merely goes through the motions of so doing.

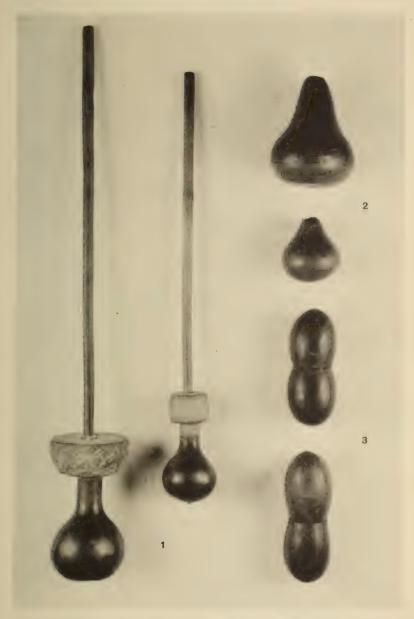
The use of coca (*Erythroxylum coca*) usurps that of tobacco in the Andean highlands and adjacent regions. The coca leaves contain the narcotic principle from which the cocaine of modern pharmacy is extracted, and the native habit of chewing the toasted leaves doubtless induces a physiological effect similar to, if less pronounced than, the modern use of cocaine—a lessening of the pangs of hunger and fatigue.

The coca plant is grown by the natives in small plantations and the green leaves gathered, toasted. and carried by the men in small knitted bags. Coca is always taken in combination with lime, and in this a striking analogy is shown with the custom of chewing betel-nut in the East Indies. The lime is generally secured by burning shells, and is carried in a powdered form in pear-shaped gourds. A man takes a handful of toasted coca leaves from his bag and puts it into his mouth, introduces a stick into the lime gourd until it is covered with lime powder, and licks this off, then chewing the coca leaves and lime together. The rattling of the stick in the lime gourd is one of the constant sounds in every Indian village. These little gourds containing lime have been found in pre-Columbian graves of indefinite age in Peru and other Andean regions, thus demonstrating the aboriginality of the custom.

The use of snuff is common among many tribes of central and northern South America, particularly in the lowland regions of Colombia and Venezuela, and was probably also in vogue in the West Indies at the time of Columbus. The tribes of this region make

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PLATE V.



1, LIME GOURDS, ARHUACO INDIANS, COLUMBIA. 2, TOBACCO GOURDS, ARHUACO INDIANS, COLUMBIA. 3, LIME GOURDS, CHUNCHO INDIANS, PERU.



a snuff in which pulverized seeds of an *Acacia* or *Mimosa*, *manioc* flour, and pulverized lime from a mollusk shell form the basic ingredients, though tobacco is apparently used in some localities. The mixture is blown or snuffed up the nostrils and produces a mild intoxication, presumably giving increased strength and courage. This snuff is most commonly known as *niopo* or *iopo*.

The ingredients are generally pulverized with a mortar and pestle. In Venezuela, where the custom seems to have reached its greatest development, the snuff is kept in a hollow jaguar bone which is permanently closed at the lower end with pitch or gum into which some object, such as a piece of glass, crystal, or shell is fixed as a decoration, and the other end kept closed by means of a stopper, generally of cloth. The snuff-holder is generally further decorated with toucan feathers and incised designs. The snuff is taken by means of a special and ornate apparatus of a Y-shape made of two hollow bird bones branching at the top, but meeting at the bottom, and wound with pitched cord. At the top, two hollow balls of wood or seeds are attached to the ends of the bones. The two balls are placed against the nostrils, and the lower end of the bifurcated tube placed in the snuff-holder. A vigorous sniff then brings some of the powder up into the nose. In Colombia, a less developed snufftaker is employed. Two hollow bird-bones are fastened by means of pitch into a V-shape, the lower apex being closed by means of pitch into which, again, a decorative element is fixed, the two bones, however, being connected. A pinch of snuff, which is kept in a gourd, is introduced into the bone, one end of which is placed in a nostril, the other in the mouth. A puff of the breath sends the powder up into the nose.

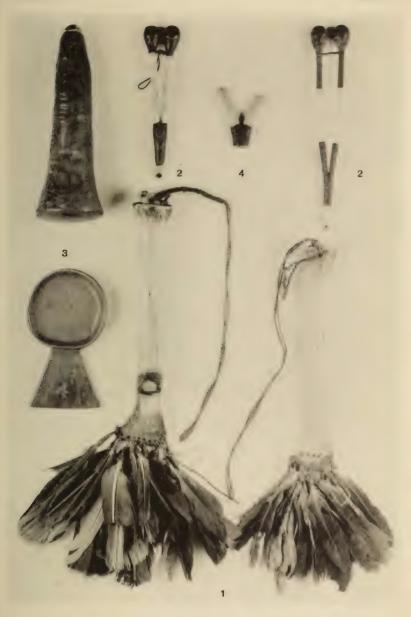
A similar custom apparently was in use in the West Indies in the time of Columbus, if we may judge

from the account of Oviedo, one of the earliest historians. This account, however, has given rise to much argument, inasmuch as he apparently confused the two customs of smoking and snuff-taking. In his history, an illustration is given of a forked tube very similar to those used in Venezuela for the taking of snuff, but the statement is made that it was this instrument which was called tabaco, not the herb.

Tobacco in the form of snuff was also used both by the Incas of Peru and the Aztecs of Mexico at the time of the Conquest.

The first European contact with tobacco was, as we have seen, in the West Indies, where the cigar was the favorite method of use. For a decade or two these islands formed the principal field for European, that is to say, Spanish, discovery and exploitation, and it is from them that most of the names and many of the customs relative to tobacco at present have been borrowed. Apparently, the early Spanish conquerors, especially those of the lower grades and the negro slaves, soon adopted the custom, and among many it became a habit. At first the practise was frowned upon by the leaders and clergy as a vice. Bishop Las Casas, the beloved "Protector of the Indians," wrote at that time, "I knew Spaniards on this island of Española who were accustomed to take it, and being reprimanded for it, by telling them it was a vice, they replied they were unable to cease using it. I do not know what pleasure or benefit they found in it." The same bewilderment seems to puzzle the minds of nonsmoking reformers to-day. Benzoni, who visited America about 1541, said, "See what a pestiferous and wicked poison from the devil this must be! It has happened several times to me that going through the provinces of Guatemala and Nicaragua I have entered the house of an Indian who had taken this herb, which

LEAFLET 16. PLATE VI.



SNUFF HOLDERS, VENEZUELA.
 TUBES FOR INHALING SNUFF, VENEZUELA.
 MORTAR AND PESTLE FOR GRINDING SNUFF, GUAHIBO INDIANS, COLUMBIA.
 SNUFF-TAKER, TUYUKA INDIANS, COLUMBIA.



in the Mexican language is called tobacco, and, immediately perceiving this sharp, fetid smell, I was obliged to go away in haste and seek some other place."

Tobacco, on the other hand, by its devotees and proponents, was regarded as a medicinal plant of wonderful power, a panacea and cure-all, endowed with magical properties. Benzoni again says, "These leaves were strung together, hung in the shade and dried. and used whole or powdered, and were considered good for headaches, lockjaw, toothache, coughs, asthma. stomach-ache, obstructions, kidney troubles, diseases of the heart, rheumatism, the poisoning from arrows, carbuncles, polypus, consumption." Monardes, who wrote a treatise on medicinal plants in 1574, enumerates the following methods of using tobacco as a medicine: heating the leaves and applying them to the parts affected; rubbing the teeth with a rag dipped in the juice: wrapping a leaf into a pill and inserting it in the tooth: boiling the leaves: making decoctions of its leaves; making a syrup of it; smoking it by the mouth; reducing the leaves to ashes; pounding the green leaves and mixing them with oil or steeping them in vinegar; using the powder as a poultice if leaves are not to be had: making fomentations; smoking through the nose; rubbing the leaves on the afflicted parts: inserting the juice into the wound; applying bruised leaves to the wound.

J. ALDEN MASON.



MEXICAN SMOKING.
FROM THE MANUSCRIPT TROANO.

Use of Tobacco in New Guinea and Neighboring Regions

BY

ALBERT B. LEWIS

ASSISTANT CURATOR OF MELANESIAN ETHNOLOGY

H. TT



ANTHROPOLOGY

LEAFLET 17

FIELD MUSEUM OF NATURAL HISTORY
CHICAGO

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	Introduction of Tobacco into Europe	.25
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D. C. DAVIES DIRECTOR

FIELD MUSEUM OF NATURAL HISTORY CHICAGO, U. S. A.

FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1924

LEAFLET

NUMBER 17

Use of Tobacco in New Guinea and Neighboring Regions

There is no single object of trade more useful to the traveller and trader in New Guinea than tobacco. It often supplies a standard of value, and serves as minor currency; a day's labor, for example, being worth so many sticks. The trade tobacco in use throughout eastern New Guinea and Melanesia is the Virginia twist or stick tobacco. In the Dutch territory, a fine-cut smoking tobacco, put up in special paper packages, is the only variety acceptable to the natives. Ordinary wooden or clay pipes are also in demand, but to a less degree, as they last for some time and also are not always used by the natives, who often avail themselves of native-rolled cigarettes or native pipes. This brings up the fact that in many regions the natives have their own way of smoking (chewing is unknown), and utilized their own native-grown tobacco long before the trader's tobacco became known to them. While tobacco was known and smoked by most of the coastal tribes, in the interior mountains its use and cultivation is almost universal, as nearly every mountain tribe so far visited, including the pygmies, raises its own tobacco. Tobacco has also been reported as growing. apparently wild, along the trails in the high mountain ranges back of Port Moresby. In the Arfak Mountains of western New Guinea tobacco has been raised, smoked, and traded to the coastal peoples since the memory of man, according to one writer. This trade was noted by A. R. Wallace in 1856, who figures a crude wooden pipe somewhat like Fig. 5, Pl. II.

Tobacco was not everywhere used by the coastal peoples, but when it was, it was usually obtained by trade from the interior. In the valleys of the Sepik (Kaiserin Augusta) and Fly Rivers tobacco is also extensively cultivated in many places. Along the Sepik River the leaves are crudely dried, and put up for trade in large rolls or packages about two feet long and eight to ten inches in diameter. For personal use the leaves are either carried loose in a small string bag, or a few are placed in a bamboo tube or box. These boxes are often decorated with elaborate designs.

On the south coast tobacco was cultivated at the mouth of the Fly River and also on the neighboring islands of Torres Straits. Here, according to a report of 1836, "they also cultivated the tobacco plant, which they prepare for smoking by drying the leaves and twisting them up into figs." Other early writers speak of tobacco being made up into a three-stranded plait.

Considerable care is usually devoted to the cultivation of tobacco. One of the Papuan government officials writes of the region between the Fly and the Dutch border as follows: "A very interesting feature is the skillful cultivation of tobacco, which is of fine quality, although the larger leaves become coarse and ribbed. Every village contains many beds of the plant, old house sites being selected for the purpose, possibly because of the well manured soil. The walls are removed before planting, and the plot is well dug and mixed with ashes. The roof is left. As the seedlings become stronger, the roof is gradually removed till only the frame remains. The leaves are collected and dried in the sun and in the houses; they are then packed in plaited rolls ranging up to six feet or so in length." On the Sepik River the seed beds are made under the houses. The young plants are transplanted to the fields, but are for a time shielded from the direct rays of the sun by palm leaves.



LEAFLET 17.



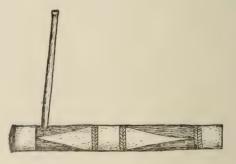
NATIVE TAKING A PULL FROM THE SMALL HOLE OF A BAMBOO TOBACCO PIPE THAT HAS BEEN PASSED TO HIM. PORT MORESBY, PAPUA.



ENJOYING A SMOKE AFTER THE DANCE. THE SHORT CIGARETTE MAY BE SEEN IN THE HOLE NEAR THE LOWER END OF THE PIPE. GONA BAY, N. E. PAPUA.

The natives of New Guinea do not chew tobacco. but smoke it either in peculiar bamboo or wooden pipes of their own manufacture, or as cigarettes. Along most of the north coast of New Guinea pipes are not used. If the leaves are dry enough, they are somewhat crumbled and rolled up in a piece of the leaf of some other plant, used as a wrapper. In some places a piece of a banana leaf is preferred. In other places the leaf of the Pandanus, Hibiscus, or other tree may be used. After wrapping, it is usually necessary to tie it with a piece of fibre to keep the leaf from unrolling. When the natives can get it, they often like paper for this purpose, and old newspapers are frequently excellent objects for trade. The size of a native cigarette is about that of an ordinary cigar or smaller. If no dry tobacco leaves are at hand, a partly dry or green leaf is held over the fire, or laid on the coals till dry enough to serve the purpose.

In the interior tobacco is smoked either as cigarettes or with a short reed or bamboo tube which serves as a sort of cigarette holder. Wollaston reports that the Tapiro pygmies, living in the far interior mountains of Dutch New Guinea, "smoke tobacco chiefly as cigarettes, using for the wrapper a thin slip of dry Pandanus leaf. When, as is often the case, the wrapper is very narrow, and the tobacco is inclined to escape, the man smokes his cigarette in a peculiar manner; he holds the unlighted end in his fingers and with his mouth draws out the smoke from between the edges of the wrapper in the middle of the cigarette; this he continues to do until the cigarette is about half consumed, when he puts the end in his mouth in the ordinary way. The Tapiro also smoke tobacco in a pipe in a fashion of their own. The pipe is a simple cylinder of bamboo about an inch in diameter and a few inches in length. A small plug of tobacco is rolled up and pushed down to about the middle of the pipe, and the smoker, holding it upright between his lips. draws out the smoke from below." This method of smoking is not unique, however. Several hundred miles to the eastward, on the headwaters of the Tedi. a tributary of the Fly, a Papuan government official found a similar custom. "The type of pipe used is very primitive and resembles a large cigarette holder more than a pipe. It consists of a straight or curved piece of bamboo, from nine to eighteen inches long, and from one-half to three-fourths of an inch in diameter. The tobacco, wrapped in a small piece of leaf, is inserted in the hole at the end of the holder, and the smoke is drawn through the hollow stem. Teased sago-leaf fibre is pushed down the pipe through which the smoke is drawn to purify it before it reaches the mouth. Natives were seen inhaling the smoke through the nostrils and blowing it out through the mouth, but this is not usual." The interior of this portion of New Guinea is almost entirely unknown, but small reed and bamboo tubes used for tobacco smoking are reported from the northern side of the interior mountains in the Dutch territory. One of these pipes has a hollow nut on the end, with an opening on the far side for the tobacco.



BAMBOO PIPE WITH UPRIGHT, FROM TIRIO, LOWER FLY RIVER, NEW GUINEA. $\frac{1}{6} \ actual \ size.$

Throughout most of the Fly valley and the coastal plain on either side, the type of pipe used is more elaborate. It consists of two parts. The main portion is a section of bamboo open at one end, but closed at the other by one of the nodal partitions. A small hole is made on one side near the closed end. This tube is fairly large, varying from one to three or four feet long, and from one and a half to three or more inches in diameter. A much smaller and shorter tube, up to a foot in length, is fitted into the small hole on the side, so as to stand up at right angles to the larger tube. The cavity of this small tube is usually enlarged somewhat at the top, and in this is placed the tobacco, either rolled up in a leaf or in the form of a cigarette.

Throughout the eastern end of New Guinea, from the Papuan Gulf on the south side and the Huon Gulf on the north, the pipe (baubau) is the same, but without the upright, the tobacco in the form of a cigarette being stuck or held in the small hole on top of the pipe. These pipes are often very nicely ornamented with incised or burnt designs (Figs. 1 and 2, Pl. II). In smoking these pipes the usual custom is to place the mouth at the opening at the end of the pipe, and draw the smoke in till the pipe is full. Then the hand is placed over the end, the upright or cigarette is removed, and the smoke drawn out through the hole at the side. The pipe is usually passed around, each person taking a pull or two. The women frequently prepare the pipe and pass it to the men. Sometimes the pipe is filled by placing the mouth over the glowing end of the cigarette or the bowl of the upright, and blowing the smoke into the pipe. Individual smokers may also keep the pipe to themselves, simply drawing the smoke through the larger tube, as is illustrated in Plate I, which shows the men refreshing themselves after a dance. Smoking, along the coast at least, does not seem to have any special significance, and is practised by the women and, in most localities, children, as well as by the men.

In the Arfak Mountains of western New Guinea a peculiar wooden pipe is used. It is cut out of a single piece of brownish wood, and consists chiefly of a bowl for the tobacco, with a very short stem or mouthpiece on the side, and a projection at the back or below to hold it by, as shown in Figs. 4 and 5, Plate II. Fig. 3 shows a double pipe of a very unusual type from the same region. A wooden bowl, made out of a section of a limb of a tree, with a hole on the side for the stem, is illustrated in Fig. 6.

The tobacco grown in the interior highlands is said to be of excellent quality, and though strong in flavor, due to the crude method of preparation, not at all unpleasant to smoke. That grown nearer the coast is very strong, and the method of smoking with the bamboo pipe doubtless adds to its effectiveness. Haddon says, "The effect of this kind of smoking appears to be very severe. The men always seem guite dazed for a second or two or even longer after a single inhalation, but they enjoy it greatly and prize tobacco very highly. I have seen an old man reel and stagger from the effects of one pull at the pipe." Jukes says of the Erub people, "In smoking their own tobacco (which is of a light brown color), they break off a piece from the plait into which the leaves are twisted, and wrap it in a green leaf to prevent its setting fire to the wooden bowl. A woman is then deputed to fill the bamboo with smoke, and on its being passed round, each person takes a long draught of smoke, which he swallows, apparently with considerable effort, and stands motionless a few seconds, as if convulsed, with the tears in his eyes; he then respires deeply, and seems to recover. They call it 'eree oora' (eri ur, 'to drink heat or fire'), and, patting their stomachs, seem much comforted after it. I tried their tobacco, but found it intolerably hot and strong." Macgillivray offers similar testimony, "On several occasions at Cape York I have seen a native so affected by a single inhalation as to be rendered nearly senseless, with the perspiration bursting out at every pore, and require a draught of water to restore him; and, although myself a smoker, yet on the only occasion when I tried this method of using tobacco, the sensations of nausea and faintness were produced."

Haddon continues, "A white acquaintance of mine who at one time took to smoking the Papuan pipe gave me the following account of his experiences. The inhaled smoke is retained for as long as possible and let out through the mouth and nose. There is a very strong draught through the pipe which drives the smoke right into the lungs. the first occasion this nearly chokes a person, and this experience generally satisfies all curiosity. After a single inhalation the confirmed smoker feels happy and sleepy; the effect is much the same as with opium, but with none of the illusions; all the senses are deadened, and after a whiff or two, the smoker goes off into a deep, heavy, but not refreshing sleep. The smoke is quite cool. My informant smoked in this manner for about six months, but had to leave it off as his heart became affected, but not his lungs. The heart's action was weakened, and he had a dry barking cough. The smoking made him generally lazy and indolent, but extremely nervous. He always took a pull when the effect of the last wore off, and had a great hankering after it."

Mention has been made above of smoking at Cape York. This is the most northern point of Australia near the islands of Torres Straits. The bamboo pipe is in use in several places around the Gulf of Carpentaria. and has undoubtedly been introduced from the Islands. This is the only part of Australia where tobacco is smoked, but the wild native Australian tobacco is chewed throughout a large part of central and western Australia. For this purpose the dried leaves are used. frequently mixed with some other substance. One writer reports the usual method for central Australia to be as follows: "The variety preferred is that growing on the tops of stony ranges; of this the leaves and stems are dried in the sun. These are then ground into powder, which is mixed with an equal quantity of the white ash of the leaves and fine twigs of Cassia eremophila if available, if not, of those parts of some other bush, and the mass is made into a bolus of suitable size with saliva. This is chewed and passed from mouth to mouth, a bolus lasting about twenty-four hours. When not in use it is carried behind the ear or in the head or arm band. The lubras (women) are allowed to chew the plant only in the natural state." The Australian tobacco is a distinct species, Nicotiana sugveolens. According to Mr. Maiden, the Australian botanist, the samples he has seen of the New Guinea plant (leaves and petioles) cannot be the N. tabacum. the common cultivated tobacco, and are "not very remote' from the Australian species.

In the Melanesian islands tobacco has been recently introduced, and is cultivated in several localities. In a few places, however, it was cultivated before the recent arrival of Europeans, and this use was probably an extension of its use in New Guinea. All over western New Britain tobacco is cultivated and smoked, as native cigarettes, both with and without a bamboo tube or pipe. The pipe here used is open at both ends, and the cigarette is simply held by the hand in the outer end of the tube.

Tobacco is also raised by the Baining, a non-

Melanesian people living in the mountains of the Gazelle Peninsula, northeastern New Britain. Here the native-made cigarette is smoked in a small bamboo tube, used as holder. The coastal tribes of this part of the island neither cultivated nor smoked tobacco till the traders introduced it.

Tobacco has also been cultivated in the northwestern Solomon Islands, Buka and Bougainville, as far back as any record goes. In Bougainville, the largest, wildest, and most mountainous of all the Solomon Islands, it is interesting to note that there are three distinct methods of preparing the leaf for market, practised in different parts of the island. In the northwestern half it is put up in short plaits, in the central region it is rolled or twisted into sausage-like rolls. while in the southeastern the dried leaves are merely strung together on a cord. The natives also distinguish three separate varieties, according to quality and flavor. The pipes used in this region are of burnt clay, apparently an imitation of European pipes. Some have wooden stems, but usually the bowl and stem are made in one piece (Figs. 7-9, Pl. II). The natives make very good clay pots and vessels, and how long they have been making these clay pipes is not known, or whether their use was preceded by a different method of smoking. Parkinson says that before about 1890 the native made pipe had only a crude clay bowl, with a small bamboo tube as stem. Probably the clay bowl was added to an original native bamboo tube, such as is still used in New Britain.

While the native tobacco is known and used throughout most of New Guinea, there are certain areas where it is not used, and where it is apparently unknown, such as a large part of the coastal plains south of the mountains in Dutch New Guinea. In other regions there is evidence that it is of fairly recent introduction. On the other hand, in the areas where it

is principally cultivated no one seems to know how long it has been in use. In some places the natives declare that tobacco was known "to the extreme length of their traditions" (Monckton). One of the legends of the Kiwai Islanders (mouth of Fly River), for example, tells how the people learned the use of tobacco from their culture hero at the same time that they were taught the use of coconuts, bananas, sago, and their other native foods. It is interesting to note that the betel nut, though now extensively used, is not included in that list. Also along the coast where the use of the betel nut is most in evidence, tobacco is less frequently used and less important than in the interior. where, in many places at least, the chewing of the betel is unknown. The names used for native tobacco also vary greatly in different regions. Altogether the facts seem to point to an ancient use of an indigenous New Guinea species of tobacco probably closely related to the Australian species.

ALBERT B. LEWIS.

LEAFLET 17. PLATE II.



1, BAMBOO PIPE WITH INCISED DESIGNS. MEKEO DISTRICT, PAPUA. 2, BAMBOO PIPE WITH BURNT DESIGNS. THE SMALL HOLE IS NEAR THE UPPER END. CENTRAL DISTRICT, PAPUA. 3-6, WOOD PIPES. ARFAK MOUNTAINS, DUTCH NEW GUINEA. 7-9, CLAY PIPES. BUKA, SOLOMON ISLANDS.



TOBACCO AND ITS USE IN ASIA

BY

BERTHOLD LAUFER

CURATOR OF ANTHROPOLOGY





ANTHROPOLOGY

LEAFLET 18

FIELD MUSEUM OF NATURAL HISTORY
CHICAGO

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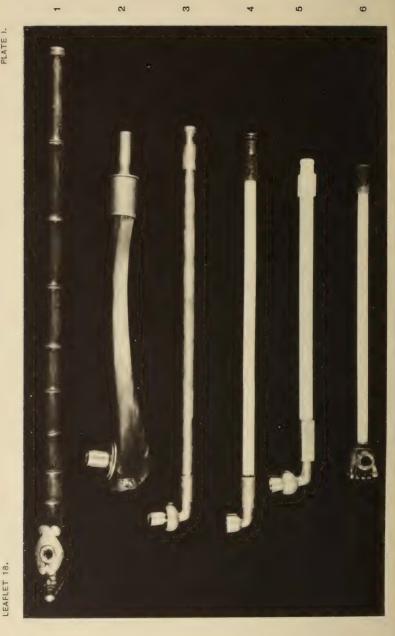
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FIELD MUSEUM OF NATURAL HISTORY CHICAGO, U. S. A.

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FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF ANTHROPOLOGY

CHICAGO, 1924

LEAFLET

NUMBER 18

Tobacco and Its Use in Asia

In this sketch conditions, as they prevailed in the seventeenth and eighteenth centuries, and the use of tobacco, as it grew out of native customs, are briefly set forth, but modern conditions, as created by international commerce and colonial enterprise, are disregarded.

The earliest datable reference to the use of tobacco in the Far East occurs in an entry under August 7th, 1615, in the diary of Captain Richard Cocks, who was chief of the English Factory of Hirado in Japan from 1613 to 1621.

"Gonosco Dono came to the English house, and amongst other talk told me that the King [that is, the Daimyo of Hirado] had sent him word to burn all the tobacco, and to suffer none to be drunk in his government, it being the Emperor's pleasure it should be so; and the like order given throughout all Japon. And that he, for to begin, had burned four piculls or hundredweight this day, and had given orders to all others to do the like, and to pluck up all which was planted. It is strange to see how these Japons, men, women, and children, are besotted in drinking that herb; and, not ten years since it was in use first."

"Four tobaka pipes purchased at Kyoto" are entered in the Log-book of William Adams (1614-19). Tobacco, accordingly, was smoked from pipes by the Japanese at that early date.

It follows from Cocks' contemporaneous notice that tobacco was introduced into Japan about the year 1605 and that it was planted and eagerly indulged in by all classes of the population within a decade after its introduction. On the whole, this inference agrees with Japanese records. We are informed by these that the tobacco plant is not a native of Japan and that tobacco-leaves were first traded to the country by the Portuguese (Namban) toward the close of the sixteenth century. About 1605 the first tobacco plantations were established at Nagasaki, the habit of smoking spread rapidly despite prohibitory decrees, and in the latter part of the seventeenth century the cultivation was practised on an extensive scale. bacco was also utilized for medical purposes. word tabako used by the Japanese in both their literature and colloquial speech is based on the Spanish-Portuguese form tabaco and confirms the correctness of Japanese tradition.

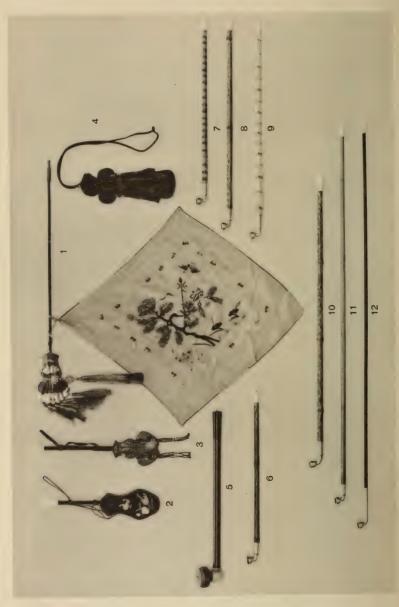
The Portuguese, however, are not responsible for the transmission of the tobacco plant into China. This is outwardly demonstrated by the word tan-ba-ku or tam-ba-ku under which tobacco first became known in Fu-kien Province in the beginning of the seventeenth century when the Ming dynasty was still in power. The Fukienese were enterprising mariners and maintained regular intercourse with the Philippines, in particular with the island of Luzon, several centuries prior to the Spaniards' conquest and colonization. In the same manner as they obtained on Luzon the peanut and the sweet potato, they also got hold there of tobacco seeds which were transplanted into their native country, first into the province of Fu-kien, whence the novel plant was diffused southward into Kwang-tung and northward into Che-kiang and Kiang-su. The first author who has left an interesting account of tobacco is Chang Kiai-pin, a reputed physician from Shan-vin in the prefecture of Ta-t'ung, Shan-si Province. He carefully studied the physiological effects of smoking and made a number of correct observations. He felt somewhat sceptical when he first came into possession of the plant, but several trial smokes convinced him of its usefulness and superior quality. He highly recommends it as a remedy in expelling colds, for malaria caused by mountain mists, for reducing the swellings brought about by dropsy, and for counteracting cholera. "In times of antiquity," he writes, "this plant was entirely unknown among us; only recently, during the period Wan-li (1573-1620) of our Ming dynasty, it was cultivated in Fu-kien and Kwangtung, and from there spread into the northern provinces. Wherever it may be planted, it does not come up in quality to that of Fu-kien which is a bit yellow in color and so fine that it has received the name 'gold silk smoke'; it is very strong and of superior aroma. Inquiring for the beginnings of tobacco-smoking, we find that it is connected with the subjugation of Yünnan Province. When our forces entered this malariainfested region, almost every one was infected by this disease, with the exception of a single battalion. To the question why they had kept well, these men replied that they all indulged in tobacco. For this reason it was diffused into all parts of the country. Every one in the south-west, old and young without exception, is at present addicted to smoking by day and night."

Therefore, in the same manner as in Europe, tobacco first served as a remedy in China and gained its first adherents among the men of the army. An imperial edict issued in 1638 prohibited the use of tobacco and threatened decapitation to those who would clandestinely hawk it. As everywhere, such decrees remained inefficient, and a contemporaneous

author writes that this order was soon rescinded, because there was no better remedy than tobacco for colds in the army. The cultivation has never been discontinued, as the labor was easy and the profit to be made was considerable. The same writer says that in his childhood he was entirely ignorant of what tobacco was, while in the closing years of the period Tsung-cheng (1628-43) there was hardly a boy three feet tall who did not smoke tobacco, so that he concludes that from this period onward tobacco culture was in a flourishing condition. This state of affairs was not altered by another edict promulgated against smoking in 1641, where the pointed paragraph occurs that this practice is a more heinous crime than the neglect of archery, which was regarded as the chief exercise of the army. Addressing the princes and high officers, the emperor laments, "It has become impossible to maintain the prohibition of tobacco-smoking, because you princes and others smoke privately, though not publicly; but the use of the bow must not be neglected."

No species of the genus Nicotiana is a native of China; in fact, none is indigenous in any other part of Asia. Nor can there be any doubt that the species first introduced into China from Luzon was Nicotiana tabacum, the typical species of America, the species with large cabbage-like leaves and purple flowers. This becomes perfectly evident from the descriptions of the plant in the early Chinese sources. Moreover it is this species which at present is most commonly cultivated all over China and the adjacent territories. Nicotiana rustica, the species with yellow flowers and broader leaves, is cultivated only to a limited extent, chiefly in northern Shen-si and in the mountainous districts of Hupeh and Se-ch'wan, in the latter province up to an altitude of 9,000 feet for





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purely local consumption. At these high elevations the other species would not succeed. The leaves of *N. rustica* receive no preparation beyond being dried in the sun, and the quality of this tobacco is naturally inferior.

In the cultivation of N. tabacum, which by the end of the seventeenth century was firmly established throughout the length and breadth of the land, the Chinese have displayed a great deal of natural acumen and aptitude without receiving lessons from foreign nations. Skilful and experienced farmers as they are, they have conceived rational methods comparable to our own and resulting in an excellent leaf. Fertile soil and land beyond the reach of inundations are selected for the successful culture of the plant. To produce a luxurious growth, the farmer will trench his fields deeply, and will manure them with beancake. Manure of vegetable origin is preferred to cattle dung which has a tendency to impart to the leaves a rather disagreeable flavor. In the spring the seeds are sown in a well-cultivated bed, and in those provinces where the nights of the vernal season are still cold, the seed-beds are carefully covered with straw or mats. The fields into which the seedlings are to be transplanted are formed into narrow ridges, each about two feet wide and a few inches apart. The seedlings are carefully removed from the seed-bed by means of small spades, great pains being taken not to shake the earth from their roots, and are set in holes previously dug in the field. The plants are arranged in two rows at a distance of sixteen inches from one another. The farmers endeavor to keep the field clean of weeds which would greatly interfere with the growth of the crop. The soil between the plants is loosened at frequent intervals. A few plants are set aside and allowed to blossom for the purpose of gaining seeds. The buds

of all other plants are removed, so that the leaves, as the Chinese say, may "gather all strength, grow thick, and improve their flavor." The leaves which occupy the lower parts of the stems are plucked, so that those which cluster around the upper parts may have a chance to expand. The bunch of leaves that grows in the crown of the plant is regarded as especially fine and aromatic, and the tobacco from such leaves is known as kai-lu ("covered with dew"). The stems grow to a height of four or five feet, each producing from ten to twenty leaves. In the autumn, the latter assume a very pale green color with a slight tinge of vellow. The appearance of the vellow tinge is the signal for the harvesting of the leaves. The stems are cut very close to the ground, and are left in their places for a few hours to dry. Before the close of the day, however, they are gathered into the garner, as exposure to the night-dew would prove injurious to them.

Now the process of fermentation begins. For the purpose of sweating the leaves are piled up in heaps for four days, and then are placed in light, airy rooms to dry. When dry, they are exposed to another sweating process and laid in heaps upon trays of trellis work, being covered with mats. They are frequently examined in order to prevent the heat becoming too excessive. The leaves are finally plucked from the stems and tied up in bundles for sale. In this manner they are used for the long or dry pipes, while for the water-pipe they are finely shredded or shaved by means of a plane. In this case the leaves have to be completely stripped of their ribs and fibres, and are trampled on by men on a wooden threshing floor. At intervals they are sprinkled with oil or wine, and are finally pressed between two hard boards by means of a huge lever. The cake of tobacco thus formed is then shaved into fine shreds which are parceled out. These packages are dried in charcoal ovens to free the tobacco from the oil.

On the whole, the Chinese medical profession cast its vote in favor of tobacco, but several physicians also recognized and denounced its deleterious effects in undisguised language. In general, the Chinese, as well as the Japanese, are moderate in the use of tobacco. Aside from being administered in malaria, a decoction of tobacco is used for destroying insects and in parasitic skin-diseases. Prepared tobacco is used to staunch the flow of blood wounds. The flower stalk of the plant is considered to be more poisonous than the leaves. It was formerly employed for stupefying fish, being chopped fine and bruised together with green walnut hulls and thrown into a pond. The vapor inhaled of the juice of fresh leaves combined with pine resin is believed to benefit the blood vessels in defective circulation. The bruised leaves were also applied in snake bite, and the dried leaves were sometimes put into beds, or burned under the bed, to drive away The deposit in the interior of an old tobaccopipe stem was regarded as a sovereign remedy for the bite of venomous snakes. This substance, as well as the water from a water-pipe when sufficiently saturated with nicotine, was believed to be the product of the five elements (water, fire, wood, metal, earth) developed in the process of smoking, and was hence named "pill of the five elements." This "pill" was used to kill insects and to cure skin diseases, snake and centipede bites, and the like.

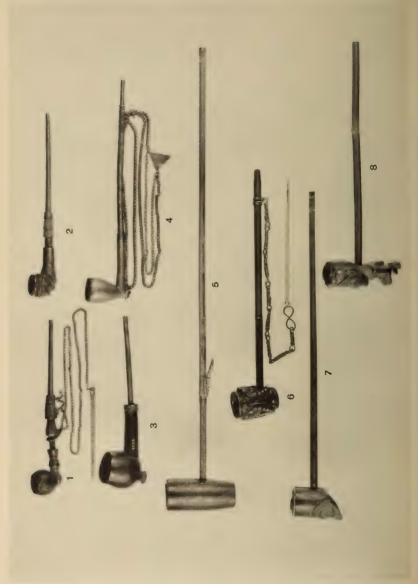
Chinese terminology relating to tobacco is also of some interest. The foreign word tam-ba-ku has always been restricted to the written language, and is now obsolete, but it survives in the form ma-ku (abbreviated for ta-ma-ku), which is commonly used for cigarette among the Canton and Fu-kien men at the ports. The plant is generally known as the "smoke-herb, smoke-flower, smoke-fire, smoke-leaf," and even "smoke-

wine," because, like wine, it is capable of intoxicating people. Tobacco is simply styled "smoke" (yen), snuff is "nose smoke;" and the Chinese "eat, sip, or inhale" smoke, while the Japanese and Tibetans "drink" it. There are several poetical names, as "herb of benevolence," "herb of yearning or affection," because he who once tasted it cannot forget it and constantly hankers after it; "herb of amiability," on account of the affectionate feelings entertained toward one another by all classes of mankind since its use became general; and "soul-reviving smoke," because a puff has the power of reviving the energies of the melancholy and wearied. Among the members of the secret sect known as Heaven and Earth Association which has a secret language, tobacco is called "ginger," and "to bite ginger" means to smoke; the pipe is termed by them the "vast bamboo" or the "blue dragon." There is another sect. the Tsai Li, which forbids its members to smoke tobacco and opium and to eat beef.

As a specimen of the Chinese philosophy of tobacco may serve the following extract from an herbal (Pen ts'ao tung ts'üan) written in the period Shun-chi (1644-61): "Tobacco has an irritating flavor and warm effect and contains poison. It cures troubles due to cold and moisture, removes the congestion of the thorax, loosens the phlegm on the diaphragm, and also increases the activity of circulation. The human alimentary and muscle systems are aided in their smooth operation as the smoke goes directly from the mouth to the stomach and passes from within to outside, circulating around the four limbs and the hundred bones of the body. There are four principal properties of the smoke: first, it may intoxicate a person, even if he was not drunk before, because the fiery vapors steam the body from both sides, front and back, having the same effect as though he would drink a cup of wine; second, it may



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About one-third actual size.

remove intoxication resulting from wine, because, when used after drinking, it softens the temper, lessens the phlegm secretion, and cures the after-effect of wine; third, it gives man satisfaction whenever he is hungry; fourth, it makes man hungry when he is sated. If a person smokes when he is hungry, he feels as though he has taken plentiful food; and when he smokes after eating sufficiently, it affords good digestion in a most satisfactory manner. For this reason many people use it as a substitute for wine and tea, and never get tired of it, even when smoking all day long.

"We must next consider the matter of respiration, which is closely connected with the circulation of the blood. The blood moves three inches either at one inhalation or one exhalation, with the result that it circulates through the whole body fifty times in the course of a day and a night; during this interval a man makes thirteen thousand and five hundred respirations. Because circulation is fully controlled by the stomach, the smoke which is absorbed by the stomach will pass through the body without interfering with the order of organs, rush around swiftly, and force its way in its progress through the body. However, human energy does not equal the natural fire; there is the only alternative as to the triumph or defeat of one or the other. -but what energy of a human being can stand a wicked fire burning all day long, and depriving him of real power, drying his invisible blood, and shortening his allotment of life without his knowledge? As a rule. the disturbance of the order of the human body will be increased by expelling the cold and wet or deposited phlegm by using the smoke, but this is only good for the person who suffers simply internal impediment or external disorder; but if he has trouble arising from fire inside of his body, smoking will inflame it, so that he should cautiously avoid it."

Our earliest authority for the acquaintance of the Koreans with tobacco and smoking is the Hollander Henry Hamel of Gorcum, who with a party of Dutch sailors travelled from 1653 to 1668, and, being shipwrecked, was held captive in Korea for thirteen years. In his Relation which appeared in 1668 he writes that fifty or sixty years previously the Koreans adopted from the Japanese the cultivation and use of the tobacco plant which had heretofore been unknown to them. The seed, the Koreans were informed on that occasion, came from Nampankouk ("country of the Namban," that is, Southern Barbarians, Portuguese and subsequently Hollanders), and hence they frequently styled the plant Nampankoy. Tobacco, therefore. appears to have been introduced into Korea from Japan early in the seventeenth century, shortly after it had become known in Japan. In the beginning when tobacco was first brought to Korea, Hamel relates, the people bought it for its weight in silver and regarded Nampankouk as one of the best countries in the world. In Hamel's time smoking was general and indulged in by both sexes, even by four or five year old children.

The Koreans tell the following story with reference to the beginnings of tobacco. One of their kings had lost a favorite court-lady of whom he had been very fond, and bewailed her death. The lady appeared to him in a dream and said, "On my grave you will find an herb, called the smoke-herb. Gather it, dry it over a fire, and inhale its smoke! It will stop your grief and make you forget your sorrow." The king obeyed her order, found the herb, and propagated its seed in his country.

Two centuries ago Korean tobacco was a great favorite with the Chinese. Twice a year the Koreans then sent a tribute mission to Peking, and among their gifts presented to the emperor of China on these occasions was as a rule included a finely shredded tobacco which the Chinese preferred to their own product.

According to a Javanese chronicle, tobacco was first introduced into Java in 1601. Probably it was introduced there by the Portuguese, and possibly re-introduced by the Hollanders. G. E. Rumpf, a botanist, who explored the flora of the Malay Archipelago in the latter part of the seventeenth century, writes that old Javanese, according to what they had learned from their parents, told him that the tobacco plant had been well known on Java prior to the arrival of the Portuguese, but solely for medicinal purposes, not for smoking: they stated unanimously that they acquired the custom of smoking from Europeans. Such oral traditions, as a rule, are devoid of historical value. The same Rumpf also learned on Java from an Amoy Chinese that the tobacco plant had from ancient times existed in China, but was rarely cultivated; and this plainly contradicts the Chinese records concerning the recent introduction. No species of Nicotiana is a native of Java: nowhere does it occur there in a wild state, nor do the Javanese have an indigenous name for tobacco. They have only the foreign tabako or tambako. Moreover, we have many excellent Chinese accounts of Java and her products covering long periods of history, and none of these alludes to a plant that might be interpreted as tobacco.

Tobacco was introduced into India by the Portuguese about 1605, first to the Deccan, and thence it was subsequently diffused to northern India. The first Englishman who mentions it is Edward Terry, who spent two years and a half (1616-19) in Malwa and Gujarat in western India as chaplain to Sir Thomas Roe. He writes in his memoirs, "They sow tobacco in abundance, but know not how to cure and make it strong, as those in the Western India" [West Indies].

We also owe to Terry the first description of the Indian hubble-bubble or hooka.

The following interesting native account of the introduction of tobacco into India is contained in the Wikaya-i Asad Beg, written by Asad Beg of Kazwin, an officer at the court of the emperor Akbar, in 1605:—

"In Bijapur I had found some tobacco. Never having seen the like in India. I brought some with me. and prepared a handsome pipe of jewel work. The stem, the finest to be procured at Achin, was three cubits in length, beautifully dried and colored, both ends being adorned with jewels and enamel. I happened to come across a very handsome mouthpiece of Yaman cornelian, oval-shaped, which I set to the stem; the whole was very handsome. There was also a golden burner for lighting it, as a proper accompaniment. Adil Khan had given me a betel bag of very superior workmanship: this I filled with fine tobacco. such, that if one leaf be lit, the whole will continue burning. I arranged all elegantly on a silver tray. I had a silver tube made to keep the stem in, and that too was covered with purple velvet.

"His Majesty [the emperor Akbar] was enjoying himself, after receiving my presents, and asked me how I had collected so many strange things in so short a time, when his eye fell upon the tray with the pipe and its appurtenances; he expressed great surprise, and examined the tobacco, which was made up in pipefuls; he inquired what it was, and where I had got it. The Nawab Khan-i Azam replied, 'This is tobacco, which is well known in Mecca and Medina, and this doctor has brought it as a medicine for your Majesty.' His Majesty looked at it, and ordered me to prepare and take him a pipeful. He began to smoke it, when his physician approached and forbade his doing so. But his Majesty was graciously pleased to say he must



CHINESE WATER-PIPES OF EARLY TYPE. 1-3, OF BRONZE (K'IEN-LUNG PERIOD, 1736-95); 4, OF TOOTNAGUE, MODERN. About one-fifth actual size.



smoke a little to gratify me, and taking the mouthpiece into his sacred mouth, drew two or three breaths. The physician was in great trouble, and would not let him do more. He took the pipe from his mouth, and bid the Khan-i Azam try it, who took two or three puffs. He then sent for his druggist, and asked what were its peculiar qualities. He replied that there was no mention of it in his books: but that it was a new invention, and the stems were imported from China, and the European doctors had written much in its praise. The first physician said, 'In fact, this is an untried medicine, about which the doctors have written nothing. How can we describe to your Majesty the qualities of such unknown things? It is not fitting that your Majesty should try it.' I said to the first physician, 'The Europeans are not so foolish as not to know all about it; there are wise men among them who seldom err or commit mistakes. How can you, before you have tried a thing and found out all its qualities, pass a judgment on it that can be depended on by the physicians, kings, great men, and nobles? Things must be judged according to their good or bad qualities, and the decision must be according to the facts of the case.' The physician replied, 'We do not want to follow the Europeans, and adopt a custom, which is not sanctioned by our own wise men, without trial.' I said, 'It is a strange thing, for every custom in the world has been new at one time or other: from the days of Adam till now, they have gradually been invented. When a new thing is introduced among a people, and becomes well known in the world, everyone adopts it: wise men and physicians should determine according to the good or bad qualities of a thing; the good qualities may not appear at once. Thus the China root, not known anciently, has been newly discovered, and is useful in many diseases.' When the emperor heard me dispute and reason with the physician, he was astonished, and being much pleased, gave me his blessing, and then said to Khan-i Azam, 'Did you hear how wisely Asad spoke? Truly, we must not reject a thing that has been adopted by the wise men of other nations, merely because we cannot find it in our books; or how shall we progress?' The physician was going to say more, when his Majesty stopped him and called for the priest. The priest ascribed many good qualities to it, but no one could persuade the physician; nevertheless, he was a good physician.

"As I had brought a large supply of tobacco and pipes, I sent some to several of the nobles, while others sent to ask for some; indeed, all without exception, wanted some, and the practice was introduced. After that the merchants began to sell it, so the custom of smoking spread rapidly. His Majesty, however, did not adopt it."

In 1610 tobacco was grown in Ceylon; smoking became general in India, and English invoices of date 1619 list tobacco as being shipped from India to Red Sea ports. Jahangir, as he himself informs us in his memoirs, issued a prohibition of tobacco in 1617. His own words are as follows: "As the smoking of tobacco has taken very bad effect upon the health and mind of many persons, I ordered that no one should practise the habit. My brother Shah Abbas [king of Persia], also being aware of its evil effects, had issued a command against the use of it in Iran. But Khan-i Alam was so much addicted to smoking, that he could not abstain from it, but often smoked."

J. B. Tavernier, a French gem merchant, who travelled in India, wrote in 1659 that tobacco grew abundantly in the neighborhood of Burhanpur, and that in certain years the people neglected saving it, because they had too much, and allowed half the crop to decay. F. Vincenzo Maria (Viaggio all' Indie Ori-

entali, 1672) even goes so far as to say that tobacco is produced in India in such quantity that both Asia and Europe could be supplied with it.

The Persians first became acquainted with tobacco during a war of Shah Abbas the Great (1586-1628) against the Osmans. Thomas Herbert, who crossed Persia in 1626 on his way to India, is the first traveller who mentions the use of tobacco in the country. A. Olearius, in 1636, found tobacco cultivated in Persia and writes that "there is hardly any Persian, what condition or quality soever he be of, but takes tobacco, and this they do in any place whatsoever, even in their mosques; they highly esteem that which is brought them out of Europe, and call it Inglis Tambaku, because the English are they who bring most of it thither."

From the preceding notes it becomes clear that tobacco appeared in the countries of the East almost simultaneously in the beginning of the seventeenth century and that the literary nations of Asia have preserved records to this effect. The civilized nations who first received it successfully advanced its cultivation and spread it to the surrounding tribes of lower culture.

The Chinese with their mercantile instinct became the most active propagators of tobacco and smoking all over Asia. As distributors of the product they played the same role in Asia as the English in Europe, and covered a larger territory than any modern tobacco trust could ever hope for. Chinese tobacco and smoking utensils are still ubiquitous among all native tribes of the Amur country in eastern Siberia, in Mongolia, Turkestan, and Tibet. As in so many other things, the Chinese set the model for all peoples with whom they came into contact. Wherever the Russians advanced into Siberia in the course of the seventeenth and eighteenth centuries, they found tobacco already cultivated

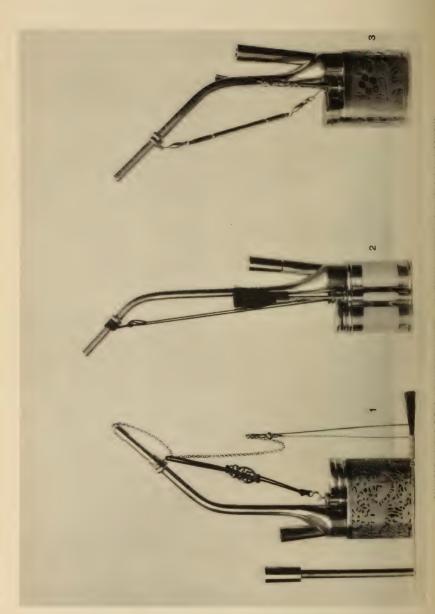
under Chinese influence and the practice of smoking it well established. When Ysbrants Ides, envoy of the Russian czar to the court of China, reached Tsitsikar, a mart of Manchuria, in 1693, he found the Dauri, a tribe of Tungusian stock, in the possession of tobacco They transmitted it to the tribes of the lower Amur and finally to the Gilvak living at the estuary of the river and on Saghalin Island. The words for tobacco and the pipe in the languages of all these peoples are based on the Chinese prototypes. They smoke, but do not snuff or chew. From the middle of the nineteenth century onward Russian tobacco also reached the Amur tribes through the medium of Cossacks, hunters, and merchants, but Chinese tobacco has always held its ground among them. At the time of my travels in the Amur country in 1898-99 the long Manchurian tobacco-leaf tied up in bundles was the favorite medium of barter.

The Ostyak on the Ob are known to have smoked tobacco in the latter part of the seventeenth century, and did so with a peculiar method of their own. They first filled their mouth with water, and lighting a pipe, swallowed the smoke together with this water. An observer of that time relates that, when they had their first pipe in the morning, they fell to the ground as though attacked by an epileptic fit, as the smoke they had swallowed took their breath away. They were in the habit of smoking only when seated. Their pipes were made of a wretched kind of wood, and when tobacco failed them, they smoked the shavings from the pipe-wood. They preferred Chinese to Russian tobacco.

In 1697 the Russians instituted a tobacco monopoly in Siberia which in the following year was ceded to Sir Thomas Osborne. The English tobacco thus introduced had to struggle with the formidable competition



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of the Chinese product, so much so that the sale of the latter was finally prohibited in 1701 under penalty of fine and confiscation, to which in 1704 capital punishment for officials was added. The interesting point is that at that moment tobacco had completed its encircling of the globe and that the tobacco having crossed the Atlantic to England and Russia clashed in Siberia with the tobacco having traversed the Pacific to the Philippines and to China, as it were, in a head-on collision.

There are, accordingly, three movements of the tobacco plant into Asia to be distinguished: one from Mexico to the Philippines continued into Formosa and China and from China into the adjacent territories; another from Europe over the maritime route chiefly fostered by the Portuguese, who transmitted the plant to India, Java, and Japan; and a third sponsored by the Russians during their advance into Siberia.

In accordance with its tardy appearance on Asiatic soil, tobacco has not entered into religious ceremonies of Asiatic peoples, as it was customary in America. Among some tribes of Siberia the pipe has endeared itself to his owner to such a degree that it accompanies him into the grave. Thus the Ostyak on the Ob inter a pipe and tobacco with the deceased. and the Tungus of eastern Siberia who bury their dead in trees place their weapons and a handful of tobacco with them. The late Dr. Reinsch tells in his memoirs (An American Diplomat in China) that, when Yüan Shi-kai's funeral took place in Peking in 1916, the usual funeral offerings, as well as the weapons, clothes. and other objects of personal use of the departed were displayed on tables in his residence; long native pipes and foreign smoking sets were included in these paraphernalia. The Ainu of Japan had sometimes valuable tobacco-boxes buried with their owners; before thrown into the grave, the box was smashed to pieces. The Ainu also had a curious tobacco ordeal: a favorite way of trying a woman was to make her smoke several pipes of tobacco; then the ashes were knocked out of the pipe into a cup of water, and she was compelled to drink it. If she passed the ordeal without falling ill, she was regarded as innocent; if she fell ill, she was found guilty.

Finally the curious fact may be pointed out that there is but one people in Asia who does not make use of tobacco in any form, and this is the Yami who inhabit to the number of about 1,700 the small island of Botel Tobago 35 miles east of Formosa. They do not cultivate the plant, nor will they accept tobacco as a gift. Not being acquainted with the preparation of any alcoholic beverage, they are complete prohibitionists.

The distribution of the cigar in Eastern Asia is very curious. Introduced by the early Spaniards from Mexico into the Philippines in the sixteenth century, it is found at present among the native tribes of Luzon and Formosa; in Korea; among the Miao-tse, an aboriginal tribe of Kwei-chou Province in southern China; among the Chinese of Se-ch'wan, the westernmost province of China, and of Shen-si in the north (but not among Chinese of other provinces); among the Karen of Upper Burma, the Burmese, and in southern India. The earliest allusion to Asiatic native cigars I have been able to trace occurs in E. Kaempfer's "Amoenitates exoticae" (published in 1712). In 1688 Kaempfer travelled from Persia to Batavia, visiting on his way the Dutch settlements in Arabia Felix. India, Ceylon, and Sumatra, and observed that the dark-skinned tribes of these regions (Nigritae gentiles) inhale the smoke of tobacco without an instrument, rolling the leaves into a whirl or twist which

is lighted at the base, while the upper end is held between the lips and sucked. The natives of Luzon and Formosa, the Miao-tse and Koreans insert the rolled leaves into the pipe-bowl; the Formosans also smoke big cigars without a pipe. Considering the striking resemblance of Luzon and Formosan pipes (Plate III) and the identical method of smoking, there is a high degree of probability in the supposition that tobacco was directly transplanted from Luzon to Formosa, independently of the movement from Luzon to the mainland. Indeed it is affirmed in the earliest Chinese chronicle of Formosa written in 1694 that tobacco was first produced on T'ai-wan (the Chinese name of the island) and that people of Chang-chou in Fu-kien made its acquaintance there and on their return home planted it in Fu-kien. This tradition tends to confirm the conclusion drawn from the above observations. It is even stated by Chinese that the savages of Formosa have a tobacco of a quality superior to their own. In Formosa it is a winter crop which is harvested in the spring.

Cheroot is the name of the truncated cigars, as they were formerly made in southern India and at Manila. The word is derived from Tamil shuruttu, Malayalam churuttu ("a roll of tobacco"); hence Portuguese charuto. In southern India cheroots are chiefly made at Trichinopoly, being known as trichies, and have a straw inserted at the end to be used as a mouthpiece. Those made in the islands of the Godavery Delta are much prized in the Madras Presidency, and are called lunka.

The cigarette, likewise introduced by the Spaniards from America, is of comparatively ancient date among the Malayan tribes; it is described by the botanist G. E. Rumpf (Herbarium amboinense, 1747): the green leaves were dried in the wind, cut into small

strips, and wrapped in dried and smoothed bananaleaves, about five or six thumbs long and a finger thick; these rolls were called *bonkos* by the Malays. This word, also spelled *bunco* or *buncus*, is derived from Malay *bungkus* ("wrapper, bundle"); it was also used for a cigar. The cigarette used by the Dusun of British North Borneo is covered with a wrapper made from the flower-spathe of the Nipa palm. These wrappers are sold ready cut at all markets, and are made up into bundles. The Alfur of Ceram also smoke tobacco in the form of cigarettes; dried leaves, the leaves enveloping maize-cobs, or the outer bast of the young leaves of the fan-palm are used as wrappers.

In India cigarettes and cigars under the Malay name (punka) are reported as early as the seventeenth century. C. Lockyer writes in his "Account of the Trade in India" (1711), "Tobacco for want of pipes they smoke in Buncos as on the Coromandel coast. A Bunco is a little tobacco wrapt up in the leaf of a tree. about the bigness of one's little finger, they light one end, and draw the smoke thro' the other; these are curiously made up, and sold twenty or thirty in a bundle." In Siam also cigarettes rolled in banana leaves were smoked. It is stated in Japanese documents that the cigarette was used in the early days in Japan, the dried leaf being rolled up in a piece of paper. In certain localities of Japan tobacco is still rolled up in a leaf, generally of the Camellia japonica, and smoked like a cigarette.

While Asia owes the tobacco plant to America, it owes nothing to America in regard to smoking utensils, for Asiatics have exerted their own ingenuity and produced their smoking apparatus from resources wholly their own. Whether the early Spanish colonists introduced American pipes into the Philippines, whether the natives of Luzon fashioned their first

pipes after models furnished by the Spaniards, and whether the first Chinese who introduced tobacco from Luzon to Fu-kien imitated Luzon pipes, we do not know. All we learn from the early Chinese accounts is that a long tube was held between the lips, and that the tobacco leaves were ignited and the smoke swallowed. Smoking, accordingly, was practised at the moment the plant was introduced and cultivated. Lu Yao, who wrote a small treatise on tobacco in the latter part of the eighteenth century, remarks that bamboo was regarded as the best material for pipestems and given preference to ebony and ivory which were apt to crack. For this reason a copper tube was inserted into the ivory stem in Yün-nan Province. In Che-kiang Province, according to Lu Yao, pipe-bowls were carved from wood and the stems made of bamboo, entirely plain for the use of rustic folks, while the gentry could afford the luxury of bowls of gold, silver, copper, or iron with inlaid designs. He also refers to a primitive method of smoking in Fu-kien: the leaves piled upon a heap of old roots in the woods were set fire to, and the rising smoke was inhaled.

A one-piece pipe without a separate bowl and mouthpiece is still found among the poor farmers and workmen of An-hui and Ho-nan Provinces (Plate I, Fig. 1). It is simply a bamboo stem cut off with a part of the root which is naturally thicker than the stem and is hollowed out a little for receiving the to-bacco. The specimen figured is old, and is mounted with a metal plaque cut out into the design of a double fish. The hole for the tobacco is lined with white copper. In other provinces this type of pipe is unknown, but a similar one of bamboo is used by the Tibetan and other aboriginal tribes of Se-ch'wan. At Ta-t'ung fu, in the northern part of Shan-si Province, I found last summer a peculiar pipe consisting of a polished sheep-

bone, the bowl and mouthpiece being formed of low brass tubes held in place by a brass coin (Plate I, Fig. 2). Among the fishermen of the Luchu Islands a bamboo pipe is still in use with the end scooped out to hold the tobacco. It may be argued that the one-piece pipe had originally a wider distribution in the East, but such a supposition cannot be supported by actual evidence at present.

As a rule, the Chinese long pipe for dry tobacco consists of three separate parts, a round bowl of small capacity, usually of white copper or tootnague (an alloy peculiar to China and composed of copper, zinc, nickel, and iron), more rarely of brass, a stem of bamboo or wood, and a mouthpiece of stone, sometimes jade, ivory, or milk-white glass. The pipe in Fig. 3 of Plate I is entirely of brass. Besides bamboo, ebony, hard black-wood (from Dalbergia latifolia), and rattan are esteemed as stems. Mottled bamboo and the square bamboo are highly prized (Plate II, Figs. 6, 8, 11). Pipes are also entirely carved from ivory with round or square stems (Plate I. Figs. 5-6). Mouthpiece and bowl are also made of walrus ivory stained green (Fig. 6); in this specimen the bowl is combined with an ivory hand which serves as a back-scratcher. Pipes for women, as a rule, are much longer than those for men, which holds good also for Japan. The Manchu are fond of very long pipes (Plate II, Fig. 1), and carry them stuck into a tobacco-pouch which is suspended from their girdle. The Manchu women adorn the stem with an embroidered silk kerchief. A new invention was made during the republican era: a metal cigaretteholder is screwed into the pipe-bowl when the owner desires to smoke a cigarette, and is taken out when he wants to smoke tobacco (Plate I, Figs. 3 and 5). Clay bowls, as far as I know, are not used in China for tobacco-pipes, but are the rule in opium-pipes. The bowl is always set vertically on the stem under a right angle, and terminates in a short metal tube made in one piece with the bowl. The stem connects this tube with the mouthpiece, being fitted into the two. This type of pipe is an original invention of the Chinese, and they deserve due credit for it. It is a practical instrument, elegant in shape, light in weight and convenient to handle, pleasant to smoke from and easy to clean.

On Plate II also four tobacco-pouches are illustrated, that in Fig. 1 of embroidered silk, those in Figs. 2 and 3 of silk with appliqué designs, and that in Fig. 4 of plain black leather.

Korean tobacco-pipes are modelled after those of the Chinese, but in distinction from the latter Koreans also make bowls of wood and clay. Good examples may be seen in Case 28, Hall 32. Japanese pipes, though they have a distinct style, consist of three parts in form very similar to the Chinese pipe.

An interesting problem is presented by the interrelation of opium and tobacco smoking. A new investigation of this subject which I made on the basis of Chinese sources has led me to the conclusion that opium-smoking sprang up as a seguel of tobaccosmoking not earlier than the beginning of the eighteenth century. Before tobacco became known in Asia, opium was taken internally, either in the form of pills, or was drunk as a liquid. The Hollanders, who exported large quantities of opium from India to Java. were the first who prepared a mixture of opium with tobacco by diluting opium in water, and who offered this compound for smoking to the natives of Java. This fact is stated in perfect agreement by E. Kaempfer, a physician in the service of the Dutch East India Company, who visited Batavia in 1689, and by contemporaneous Chinese documents. A Chinese author,

who wrote a history of the island of Formosa, which was under Dutch rule from 1624 to 1655, even intimates that the inhabitants of Batavia, who were originally excellent fighters and had never lost a battle. were enervated and conquered by the Hollanders by means of opium prepared by the latter for smoking purposes. Be this as it may, the custom was soon imitated by Chinese settlers on Formosa, and smokingopium was smuggled into that country from Batavia despite prohibitory regulations of the Chinese authorities. Opium was then boiled in copper kettles, and the mass was invariably blended with tobacco; the price for this product was several times greater than that for tobacco alone. It was a much later development to smoke opium in its pure state. The opium-pipe, as it still exists, was invented by Chinese on Formosa in the first part of the eighteenth century. We have several descriptions of the opium-pipe written by authors of that period, which leave no doubt of the fact that in principle the instrument was then identical with the modern one. An old opium-pipe with ivory mouthpiece beautifully stained a deep lustrous brown by an inveterate smoker is reproduced in Plate II. Fig. 5. The stem is lacquered red and ornamented with fine cloud designs. The bowl fashioned from Yi-hing terra cotta and neatly decorated is inserted into a white jade piece carved in the form of a closed hand. is not the place to go into the details of opium smoking; it is mentioned here merely in order to show that the opium-pipe is based on the tobacco-pipe, and that opium-smoking has grown out of tobacco-smoking.

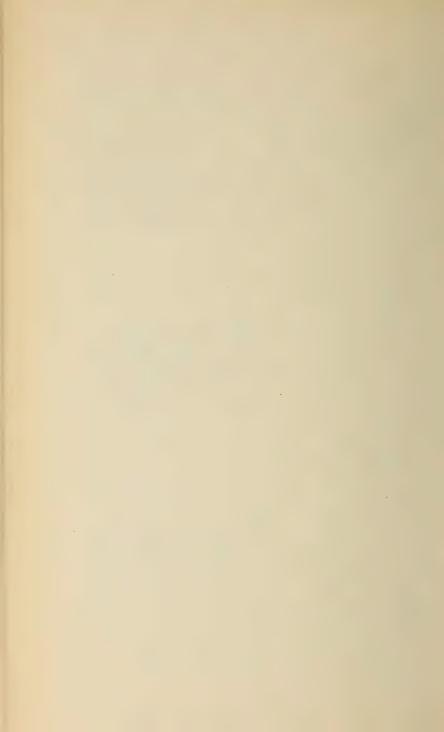
Four Philippine pipes from Luzon are illustrated on Plate III, Figs. 1-4. Those in Figs. 1-2, made by the Bacun of Igorot stock, have carved wooden bowls of the same rounded form as the Chinese pipes, and have another characteristic in common with the latter

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CHINESE WATER-PIPES OF MODERN TYPE. 1-2, OF BRASS, FROM SUCHOW; 3, OF TOOTNAGUE, FROM CANTON.

About one-third actual size.



in that the stem is carved out of the same piece with the bowl; a slender short brass mouthpiece is inserted into the stem. The pipes in Figs. 3-4 are from the Ifugao, likewise of Igorot stock; the former is carved from a hard reddish wood, the latter is entirely of brass, the mouthpiece being wrapped around with brass wire, and a double brass chain being attached to the stem. The pipes in Figs. 1-2 were collected by F. C. Cole, those in Figs. 3-4 by S. C. Simms, on Museum expeditions to the Philippines. Other types of Philippine pipes are illustrated in "The Tinguian" by F. C. Cole (Museum Publication 209, p. 429). The leaf is rolled into thin cigars which are placed in the pipe-bowls,—a practice followed by the aboriginal tribes of Formosa.

The Formosan pipes consist of a cylindrical or barrel-shaped wooden bowl perforated at the side for the insertion of a reed or thin bamboo, which is not provided with a separate mouthpiece. The bowl in Fig. 5 is neatly engraved with geometric and floral designs and decorated with tiny silver studs. That in Fig. 6 has two human faces carved on each side, each face being outlined by rows of silver studs, eyes and mouth being formed by silver pieces; a brass scraper is attached to a wire chain fastened to the stem. On the bamboo bowl in Fig. 7 a single face is carved in front. The pipe in Fig. 8 shows the complete figure of a crouching man of rather naturalistic style, carved from wood, the head forming the bowl; such figure pipes also occur in the Philippines. These four pipes come from the Paiwan tribe, Jamari Village, Formosa, and were obtained by S. Ishii; they were presented to the Museum, together with a representative collection from Formosa, by Dr. Frank W. Gunsaulus in 1919 (exhibited in Case 43, Hall 32).

Besides the dry pipe, a method of wet smoking unknown in America was developed in Asia. Whatever the mode of construction, the principle underlying all water-pipes is the same, and is based on the desire to neutralize, as much as possible, the poisonous properties of tobacco by permitting the fumes, before being inhaled, to pass through water. In this manner a proportion of nicotine is absorbed by the water, and the smoke is purified, cooled, and moderated in strength.

In India this type of pipe is called hooka (also spelled huka), Anglo-Indian hubble-bubble. It consists of a hollow, oval, metal or earthenware vessel or a coconut shell partially filled with water (Case 33, Hall 32). From this vessel arise two tubes—one the mouthpiece, the other being the attachment for the actual pipe, the *chillum*, usually of clay, which contains the tobacco. The fumes pass through the water when the pipe is put to work. The tobacco is cut small or reduced to a powder which is kneaded into a pulp with molasses and a little water. It is thus made into large cakes. It is ignited with a burning piece of specially prepared charcoal, and contact with glowing charcoal is needed to keep it alight.

Early in the seventeenth century the water-pipe was used by the Persians, and it is possible that the instrument was invented in Persia. The first description and illustration of it is found in one of the early books on tobacco, the Tabacologia (written in Latin) by the physician J. Neander and printed at Leiden in 1626. The two pipes figured by Neander correspond exactly to the modern Persian *ghalian*, and are expressly credited by him to the Persians. In view of the fact that tobacco became known in Persia only in the beginning of the seventeenth century, it is somewhat amazing that in the course of a few years, a

decade perhaps, the Persians should have conceived the invention of so complex an apparatus as their water-pipe represents; and this state of affairs has induced some authors to advance the opinion that the water-pipe pre-existed in Persia, being formerly used for the smoking of hemp, and was afterwards employed for tobacco. This is a rather attractive hypothesis, but any direct historical evidence is lacking for it; no document has as yet come to light to show that the Persians or Indians really smoked hemp out of an instrument in times prior to the introduction of tobacco, nor is the description of such an instrument on record. All the accounts of hemp-smoking we possess were written after this time, and it is as a rule a mixture of tobacco and hemp that is used for smoking.

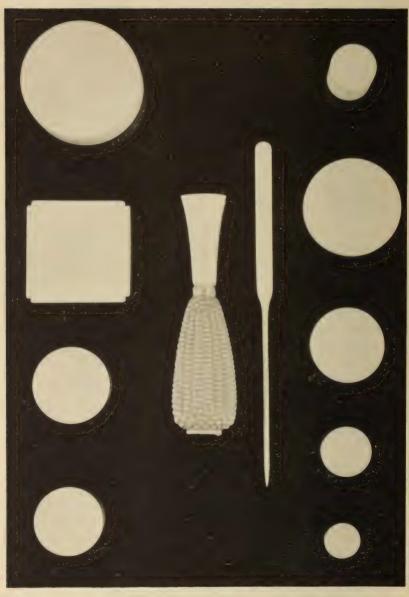
Speaking of the coffee-houses of the Persians, John Fryer, who travelled for nine years in India and Persia (1672-81), writes, "They are modelled after the nature of our theatres, that every one may sit around, and suck choice tobacco out of long Malabar canes, fastened to crystal bottles, like the recipients or bolt-heads of the chymists, with a narrow neck, where the bowl or head of the pipe is inserted, a shorter cane reaching to the bottom, where the long pipe meets it, the vessel being filled with water: after this sort they are mightily pleased; for putting fragrant and delightful flowers into the water, upon every attempt to draw tobacco, the water bubbles, and makes them dance in various figures, which both qualifies the heat of the smoke, and creates together a pretty sight."

The Arabs propagated the water-pipe in Egypt and over many tracts of Africa, where it appears in a great variety of forms. As early as 1626 Thomas Herbert found the hooka in use among the inhabitants of Mohilla, one of the four islands forming the Comoro. In 1638 it was noticed on Madagascar by

Peter Mundy, who writes, "Most commonly the men wear about their neckes in a string sundry implements off iron, etc., ... a mouth peece for a tobacco pipe. having the tobacco growing here, which they draw through the water as in India, their hucka beeing the end off a horne with a short pipe or cane, to the end off which they apply their mouth peece afforesaid." As Mundy had spent several years in India (1628-34) in the service of the East India Company before coming to Madagascar, he is also authority for the early use of the hooka in India. As already mentioned, it is described by Terry as early as 1616. In the latter part of the seventeenth century it advanced to Siam, where La Loubère, a French envoy to Siam, noticed it in the hands of resident Mohammedans. The Mohammedans apparently spread it all over Asia, also to Chinese Turkestan. The Chinese report that the water-pipe made its first appearance at Lan-chou, capital of the province of Kan-su, in the beginning of the eighteenth century, and came from there together with the finely shredded tobacco used for the water-pipe. Lan-chou is still the producer of the best water-tobacco, which in appearance is not unlike the Turkish cigarette tobacco. It is also a centre of the Mohammedan population, and, adjoining Turkestan in the west, Kan-su is likely to have been the home of the Chinese waterpipe. The Chinese, however, received merely the impetus from Persian or Turki Musulmans; for, compared with the clumsy apparatus of Persia and India, their water-pipe is so convenient, simple, graceful, and artistic that it may be put down as an invention wholly their own.

There are two forms of water-pipe in China,—a plain one which originated in the eighteenth century, and a more complicated one, developed in the nineteenth century. The older ones are now very scarce,





CHINESE IVORY TOBACCO AND OPIUM BOXES (AT TOP); SNUFF-BOTTLE WITH IVORY FUNNEL AND SPATULA (IN CENTER); SET OF IVORY SNUFF-DISHES (ON SIDES).

One-half actual size.

but I have been fortunate enough to secure three good specimens made in the K'ien-lung period (1736-95) and illustrated in Plate IV. The one in Fig. 1 is in shape of a standing crane, the body of the bird forming the water-vessel, and its beak the mouthpiece; the tobacco receiver is lost. The pipe in Fig. 2 represents a crouching elephant caparisoned and carrying on its back a vase, which holds the tobacco; the elephant's trunk forms the smoke-tube. Elephants of this style are frequent in K'ien-lung bronzes, as censers, candlesticks, and flower-vases (examples in Case 24, Hall 24). The water-receptacle of the pipe in Fig. 3 has the shape of an obtuse cone: the stem is worked into the appearance of bamboo, and the whole is covered with very fine engravings of floral and leaf designs. The pipe in Fig. 4, entirely made of tootnague and undecorated, is modern and manufactured by the firm Changte-tai at Suchow; it is reproduced after the old style, and is still in vogue among old-fashioned folks.

Six examples of the new type of water-pipe are selected from a large number in the Museum collection and reproduced in Plates V and VI. The principal innovation lies in the fact that a receptacle for storing the tobacco has been added in the form of a cylindrical vessel with hinged cover, which is closely joined to the water-receptacle and together with the latter is encased in an oval box. The pipe proper is loosely stuck into this box and held in position by means of a chain (or sometimes silk cords terminating in tassels). A scraper with brush inserted at the top and a pair of pincers for picking the tobacco are placed in detachable tubes. In a word the tendency is to concentrate and have all the necessary articles conveniently arranged in the instrument, so that it can easily be handled and carried. In Fig. 1 of Plate V, the single parts are shown separately, the smoke tube with a small cavity in the

upper end in which a pinch of tobacco is placed (to the left of the pipe), the scraper in front, and the pincers to the right. The surface of the box is treated in open work and decorated with a peacock and a phœnix. The mouthpiece may be closed with a metal cap when the pipe is not in use. This pipe was made at Canton. In Fig. 2 the box is inlaid with ivory. In Fig. 3 the box is finely chased with flowered branches. The two latter pipes come from Hangchow. The pipe in Fig. 1, Plate VI, made at Suchow, is of brass and plain; the box is of rectangular shape. This pipe is regarded by the Chinese as highly artistic. The one in Fig. 2, of brass also, is engraved with a landscape all around the box. That in Fig. 3, of tootnague, is a specialty of Canton; the box is encased in black varnished leather in which designs are neatly cut out.

Water-pipes are also made of pure copper, and there is a great variety of shapes and designs. Those of tootnague are frequently inlaid with ornaments of copper, brass, bone, horn, tortoise-shell, or enamel. It would be easy to collect several hundred different varieties in different parts of the country. A new pattern was recently inaugurated at Shanghai: the water-receptacle is built in the shape of a boot, there is no tobacco receptacle, and the smoke-tube slides into the boot so that it is no longer than eight inches. On account of its reduced dimensions and light weight it can easily be carried in the pocket, but it lacks artistic merit. Water-pipes are used alike by men and women, and are freely offered to guests and visitors; they are lighted by means of paper spills. Formerly water-pipes of enormous size were circulated among the patrons of a theatre, and a cash or two were paid for a puff.

In connection with the water-pipe, a curious custom has developed among some tribes of Assam and Upper

Burma, and this is the use of nicotine water. The women of the Chin smoke the hubble-bubble largely for the benefit of the men. When the water in the water-receptacle is sufficiently saturated with nicotine, it is poured into a gourd. This liquid, however, is not swallowed; the men merely retain it in their mouths for a time and then spit it out. Sir J. George Scott characterizes the process as "merely a lazy form of chewing," though chewing is apparently not involved. The nicotine gourds of the men are often ornamented with ivory stoppers and painted with vermilion. This juice is said to act as a tonic, and travelling Kuki who eat nothing all day keep their strength up by constant sips of this juice which they retain in the mouth not more than three minutes at a time.

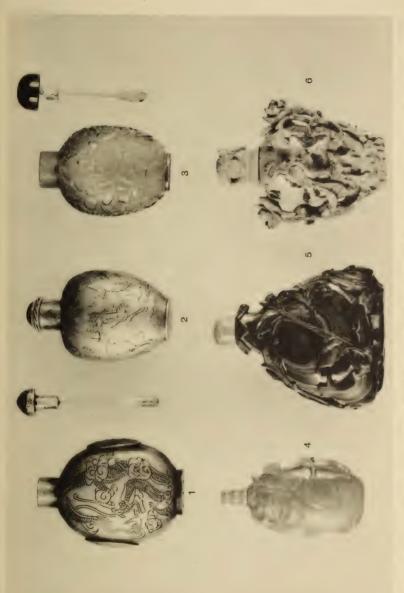
Tobacco-chewing is not practised in China, Tibet, Korea, and Japan. It is wholly confined to the zone of the betel-chewers, which includes India, certain portions of Farther India like Siam and Indo-China, and the Malay Archipelago. In this region tobacco leaves are added to the ingredients chewed with the nut of the areca-palm, or tobacco alone is chewed together with lime, while smoking tobacco is reduced to a minimum; cigars and cigarettes prevail in this area over the pipe. Among some tribes, as, for instance, the Karen of Upper Burma, smoking is almost as prevalent as betel-chewing. It is interesting to learn from a Japanese author, who wrote in 1708, that at that time Siamese and other foreigners at Nagasaki were observed to chew tobacco—a practice unknown to the Japanese.

A curious mode of smoking is practised in some localities in the Himalaya, southern Tibet, Kashmir, Baltistan, and Russian Turkistan. This is a stationary earth-pipe. Two holes are dug in the earth of a sloping bank, connected by an underground channel. In

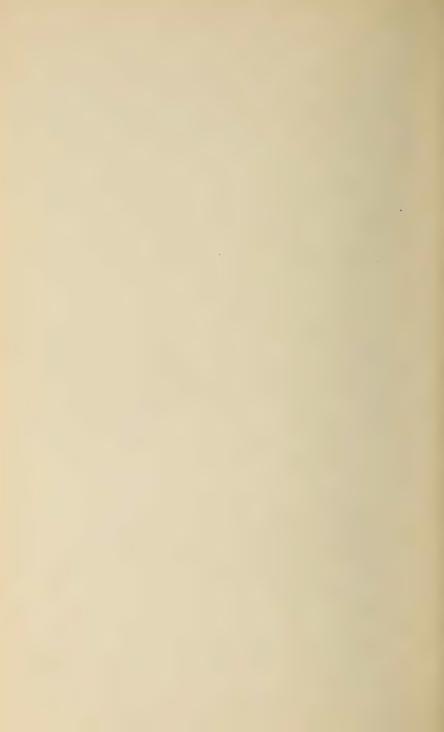
one hole is placed the lighted tobacco, and the smoker, crouching over the other opening, sucks out the smoke. A reed is sometimes inserted in the latter as a mouthpiece. It seems that this method is resorted to when a pipe is lacking. An interesting illustrated article on this subject has been written by H. Balfour under the title "Earth Smoking-Pipes from South Africa and Central Asia" (*Man*, 1922, No. 45).

In Asia, snuff is taken by the Chinese, the Japanese, the Tibetans, and the Brahmans of India; it is unknown in Persia. In China snuff-taking has developed into a fine art. The impetus to the practice was doubtless given by the Jesuit missionaries at a time when they wielded a powerful influence at the court of the Manchu emperors. In 1715 the emperor K'ang-hi celebrated his sixtieth birthday, and the festivities held in commemoration of this event and the homages paid to the sovereign are minutely set forth in a voluminous Chinese work. In the list of presents made to the emperor on this occasion figure also two bottles of snuff as the gift of the Jesuits Stumpf, Suarez, Bouvet, and Parrenin. It is no wonder that France, where snuff-taking was an established custom of the elegant world, should have communicated it to China. Snuff was imported from France in packages bearing three lilies as a coat of arms, and this design was adopted by the snuff-dealers in Peking as their emblem. The fleur-de-lis still forms the insignia of a snuff-shop in Peking, and it is even asserted that to this day the chief sellers of snuff are Roman Catholic converts. The largest snuff business in Shanghai, however, where I obtained last summer ten samples of the principal varieties of the article, is in the hands of Mohammedans from Lan-chou.

As early as 1685 snuff occurs in a customs tariff among the foreign imports of Canton. It was be-



CHINESE SNUFF-BOTTLES. 1, OF BRASS; 2, OF TOOTNAGUE; 3, OF AMBER; 4, OF AGATE; 5, OF MALACHITE; 6, OF TURQUOIS. One-half actual size.



lieved to dispel colds and act as a sudorific. Soon afterwards it was manufactured in the capital, as we read in the Hiang tsu ni ki, a Chinese work written in the early years of the eighteenth century: "Recently they make in Peking a kind of snuff which brightens the eves and which has the merit of preventing infection. It is put up in glass bottles, and is sniffed into the nostrils with small ivory ladles. This brand is made exclusively for the Palace, not for sale among the populace. There is also a kind of snuff which has recently come from Canton and which surpasses that made for the Palace. It is manufactured in five different colors, that of apple color taking the first rank." Finally we hear that various kinds of snuff are used in the Palace,-snuff imported from abroad, snuff made at Canton, and several other grades made of native tobaccos. That of duck-green color was esteemed most highly, that of rose color ranked next, and that of soy color came third. Mint, camphor, and jasmine were (and still are) the principal aromatic ingrediences: essence of rose was also mixed with it. In the eighteenth century good qualities were sold for their weight in silver, and were a favorite gift among friends. The Portuguese distributed snuff from their settlement at Macao.

On account of its peculiar aroma a certain brand of tobacco growing in Shan-tung Province is given preference in the manufacture of snuff. The dried leaves are carefully freed from the stems and ribs, and are crushed in a mill or mortar to a fine powder which is several times winnowed through sieves until it is as fine as wheaten flour. The tobacco powder is then scented with aromatic substances, and is packed in small tubes of tin. The workmen have to keep their mouths and noses covered during this occupation, in order to prevent perpetual sneezing that the fine dust

might provoke. Lu Yao, who wrote a treatise on tobacco in the latter part of the eighteenth century, observes that those who have made a long-continued practice of taking snuff will not sneeze any more.

In Peking, where snuff is more popular than in other cities of China, it is said to be taken chiefly for the benefit of one's nose, protecting it from the plentiful dust of the capital and saving it the offensive street odors. They also attribute to snuff medicinal virtues and beneficial effects, particularly after a heavy dinner, so that it is taken for curative purposes or made the vehicle of conveying other medical agents into the system. It is believed to be good for pain in the eyes, toothache, throat-trouble, asthma, and constipation. Like the Italians, the Chinese have great faith in old snuff, and the Peking dealers in antiques dispose of snuff alleged to be a century old or even older and stored in big glass jars of the same period. It is said that the habit is now on the decline, and it may be doubted that it ever was very general; it seems to have always remained a luxury confined to the wellto-do, especially the class of officials. The fact that it was a popular sport in high society during the eighteenth century is plainly visible from the large number of very artistic snuff-bottles which have come down to us from that period. Almost every substance available for this purpose in the three kingdoms of nature has been utilized for the making of snuff phials: the beak of the hornbill or buceros, ivory, coral, mother-of-pearl, amber, jade, agate, carnelian, chalcedony, rock-crystal, malachite, turquois, lapis lazuli, gold, silver, brass, white copper, porcelain hard and soft, painted enamel, carved lacquer, glass painted or cut in different layers of colors, and even bamboo, nut-shells, and various hard fruits. There is an endless variety of shapes and designs, and many are

veritable gems eliciting our admiration for the skill and ingenuity of the lapidary. As to forms they are traceable to older drug-phials, and since snuff was placed in the category of medicine, it is easily understood that a drug-phial did service as a snuff-holder. The old drug-phials, however, were limited to pottery or porcelain as to material, while the manifold varieties of material for the use in snuff-bottles are characteristic of the K'ien-lung period (1736-95).

In former times snuff-bottles were part and parcel of a gentleman's outfit, and people were proud of displaying them. Snuff-bottles are closed by a stopper in the form of a small knob made of jade, coral, turquois, tourmaline, or colored glass. Attached to this stopper is a small ladle of silver, ivory, bone, horn, or bamboo, by means of which the snuff is taken out of the bottle and placed on the thumb-nail (Plate VIII, Figs. 1 and 3). From the thumb-nail the substance is conveyed into the nostrils. In order to fill the bottle with snuff, a slender funnel carved from ivory is inserted into the opening, and the snuff is poured through the funnel by means of an ivory spatula (Plate VII, The snuff-bottle here illustrated is of in centre). yellow glazed porcelain in shape of a maize-cob. Those who wish to serve a variety of snuffs to their friends, especially after dinner, avail themselves of a set of tiny ivory dishes of varying sizes, seven of which are shown in Plate VII; on these the snuffs are arranged and served to guests. An ivory box to hold tobacco and a smaller one for opium are illustrated in the same Plate (at top).

Plates VIII and IX illustrate a small selection of ancient snuff-bottles in the Museum's collections. That in Plate VIII, Fig. 1 (presented by P. J. Bahr of Shanghai), is of brass engraved with a dragon, and is unique in being inscribed on the bottom with the

name of the maker and a date of the Shun-chi period (11th year), which corresponds to the year 1653. was made by Cheng Tsung-chang. A snuff-bottle of tootnague (Fig. 2) is finely engraved with a scene on each side; the one shown represents the Taoist goddess Ma-ku rowing a boat which is a rugged, bare tree and carries her basket filled with gifts of blessing. The next bottle (Fig. 3) is carved from transparent Burmese amber with raised designs of two phænixes and peonies: that in Fig. 4 is carved from chalcedony with graceful floral and leaf designs in undercut relief, the knob being of turquois. Fig. 5 represents a rare specimen cut from a dark green malachite veined with light green zones and decorated with a pomegranate, leafed branches, and birds; the stopper is of pink tourmaline. The bottle in Fig. 6 is a carving from green and bluish turquois in the matrix decorated with a phænix perching on a rock and surrounded by flowers and leaves in high undercut relief.

Of agates there is an immense variety: the bottle of triangular shape (Plate IX, Fig. 4) is of moss agate, milk white in color with strata of yellow and black natural designs which look like ferns. The oval-shaped bottle (Fig. 5) is carved from an agate with yellow clouds and dark brown streaks on the sides. In such pieces the lapidary strives at bringing out the peculiar coloration of a stone to its best advantage. The brown agate (Fig. 7) is shaped into a jujube fruit of surprising naturalness, with three peanuts and a bee appearing in high relief. A snuff-bottle of yellowish jade carved into the appearance of a basket, with stopper of tourmaline, is illustrated in Fig. 8.

A snuff-bottle of glass carved in cameo style, two hydras of ruby color standing out in high relief, is shown in Plate IX, Fig. 1. The Chinese were always fond of treating glass like semi-precious stones and cutting and polishing it in its hard state. They know



CHINESE SNUFF-BOTTLES. 1-3, 6, OF GLASS; 4, 5, 7, OF AGATE; 8, OF JADE. One-half actual size,



how to produce in glass an astounding wealth of colors by means of metal oxides, as iron pyrites, iron oxides, copper oxides, acetate of lead, and others, and try to imitate in glass the tinges of jade, agate, malachite, lapis lazuli, amber, jet, coral, as well as leaves and fruits; thus a gourd in its natural colors of green and white (Fig. 2) and a peach in the process of ripening (Fig. 3). They are skilful also in fusing together glasses of different colors or introducing into the mass spots, veins, or bands with a view of rivaling nature in the imitation of stones which serve as models. Sometimes the color of the glass is brought out to its full perfection by a simple process of polishing; sometimes feet, handle, and neck of a vessel are added with glass of a color differing from that of the body. In many cases there are several layers of glass of various tints placed one above the other, the upper one being cut into scenes or figures that stand out in high relief from the body of the vessel.

An industry characteristically Chinese is the manufacture of glass snuff-bottles with decorations colored by hand in the interior of the glass. The bottles required for this purpose were made at Canton, and were sent there from Peking for painting. As the surface of the glass is too smooth to take pigments, the inside is prepared with pulverized iron oxydul which is mixed with water. This liquid shaken in the bottle for about half a day will form a rough, milk-white coating suitable for receiving paints. In executing the work the artist lies on his back, holding the small bottle up to the light between the thumb and the index finger of his left hand and with a very fine brush in his right hand. The hairy tip of the brush is not straight, as usual, but stands under a right angle against the handle. His eyes are constantly fixed on the outer surface of the glass, thus watching the gradual development of the picture as it emerges from under the glass. He

first outlines a skeleton sketch in black ink, starting from below and then passing on to the middle and sides, finally inserting the colors. Half a day is sufficient to complete an ordinary piece, while a whole day and more may be spent on more elaborate work. The subjects include landscapes, genre and battle scenes. as well as flower-pieces. This art-industry commenced in the K'ien-lung period (1736-95), and the little masterpieces turned out at that time are unsurpassed. A good example of this period, dated 1740, is illustrated in Plate IX, Fig. 6. In addition to the figure-painting, the surface of the glass bears etchings of bamboo and plum-blossoms. Specimens of the Tao-kuang period (1821-50) also are usually good, but scarce. The modern output is chiefly intended for the foreign market, and does not stand comparison with the products of bygone days: the bottles are large, coarse, and clumsy, and the paintings are usually crude.

The Portuguese appear to have introduced snuff into India. Gautier Schouten, who travelled in India from 1658 to 1665, writes that the Portuguese women of Goa were in the habit of taking both betel and snuff, and constantly carried a snuff-box in their pockets. Many people appeared in the streets of Goa with a snuff-box in their hands and let it circulate; they seemed to vie with one another in sneezing, and were always seen with lips and noses stained by tobacco.

In cultivating tobacco for the manufacture of snuff, it is customary in India not to irrigate the crop from wells, but to grow the plants by the aid of rain alone. A Brahman may take snuff, but he should not smoke a cheroot or cigar. Once the cheroot has touched his lips, it is defiled by the saliva, and therefore cannot be returned to his mouth. This rule was adopted by the clergy of Tibet; the Lamas must not smoke, and smoking is strictly forbidden to the young clericals. Tibetans smoke but rarely, while snuff is a passion

with all classes of the laity and clergy. Snuff is prepared in round wooden boxes, across the interior of which is stretched a fine cloth sieve. The coarse to-bacco is put in the top of the box through a hole in the lid, which is closed by a wooden stopper, and by lightly striking the box on the knee the finer parts are sifted through into the lower compartment (Plate X, Fig. 1). By a little aperture in the lower part of the box the snuff is poured out onto the nail of the left thumb held against the index, and is thus inhaled. Tobacco is imported into Tibet from China, Bhutan, India, and Nepal. The leaves of the rhubarb plant are frequently used as a substitute for it, being either mixed with tobacco leaves, or even used pure.

The Tibetan snuff-bottle in Fig. 2 of Plate X is carved from the burl of a maple-tree, and is mounted with brass ornaments; that in Fig. 3 is formed by a bean, the opening in the centre being closed by a wooden plug. The snuff is poured in through this aperture and taken out through the tube of soft stone inserted at the top. Horns of wild sheep, yak, and oxen are largely used as snuff-containers, particularly by the nomadic tribes of eastern Tibet. The horns are well polished, plain or incised with geometric ornaments, or decorated with silver, white copper, or copper bands. They are filled through the lower end which is tightly closed by wooden or metal covers, and the snuff is taken out through the upper pointed tip, closed by a stopper (Fig. 5). The specimen in Fig. 4 is cut out of animal bone, with wooden lid and handle of leather thong. More examples may be viewed in Case 33, Hall 32, where Tibetan tobacco-pipes are also on exhibition.

The preceding brief sketch is based on an extensive manuscript of the writer, which may be published at a later date.

B. LAUFER.



LEAFLET 18.



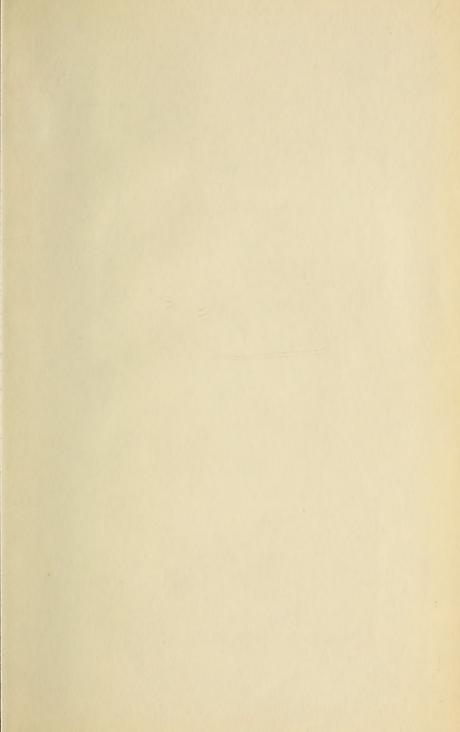
SNUFF-BOXES AND SNUFF-HORN FROM TIBET.

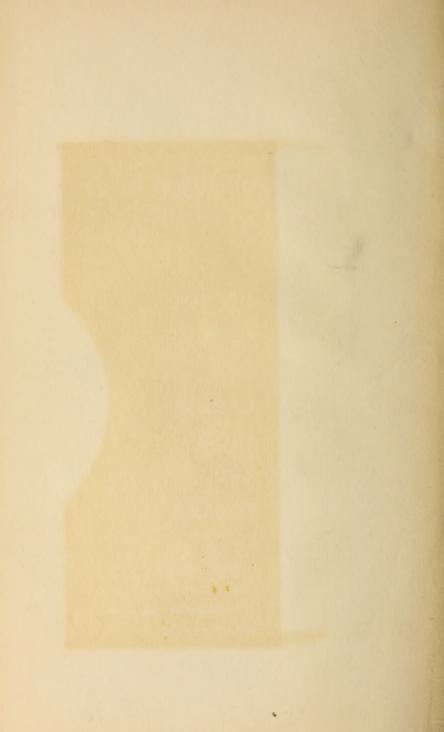
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